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Promoting Clinical Excellence …Since 1903…

The Indian & the International Veterinary History: An Overview

Dr.P.Selvaraj

Associate Professor of Clinical Medicine

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India is the Home for the oldest animal care professionals in the known history and the World's first animal hospitals, run by Emperor Asoka

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The Indian History…

- Domestication of dogs, buffaloes, elephants, and fowls occurred in India between 6000 and 4500 BC.
- Strong archaeological evidence is available for existence of an advanced civilization in Mohenjo-daro, Harappa (now in Pakistan) and certain other places in northern India around 2500 BC.
- The people of these civilizations had both humped and humpless cows, buffaloes, elephants, goats, fowl, etc.

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The Indian History…

- Cattle husbandry was well developed during the Rigvedic period (1500–1000 BC) and the cow (Kamdhenu) was adored and considered the 'best wealth' of mankind.

- Atharvaveda provides interesting information about ailments of animals, herbal medicines, and cure of diseases. Aryans laid great emphasis on protection of cows.

- Shalihotra, the first known veterinarian of the world, was an expert in horse husbandry and medicine and composed a text Haya Ayurveda.

- Sage Palakapya was an expert dealing with elephants and composed a text Gaja Ayurveda. During Mahabharata period (1000 BC), Nakula and Sahadeva, the two Pandava brothers were experts of horse and cattle husbandry, respectively.

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International Veterinary History

Courtesy:

Fred J. Born, DVM

http://en.Wikipedia.org

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The History of the Horse Doctor
(equarius medicus)

A Brief Summary of 4,000 Years of Veterinary History

by Fred J. Born, DVM

Preface

According to some historians, the first date of recorded history appears to be when the Egyptian calendar was invented, in 4242 BC. It had 360 days with 12 months of 30 days each.

According to The Timetables of History
by Bernard Grun, based upon Werner Stein"s *Kulturfahrphan*

In 2772 BC, Egypt introduced a 365 day calendar without adjustments.

According to http://en.Wikipedia.org/wiki/Egyptian calendar

The oldest written record of veterinary procedures is contained in the Egyptian papyrus of Kahun (dating back to 2160 - 1788 BC)

Hammurabi 1810 – 1750 B.C.

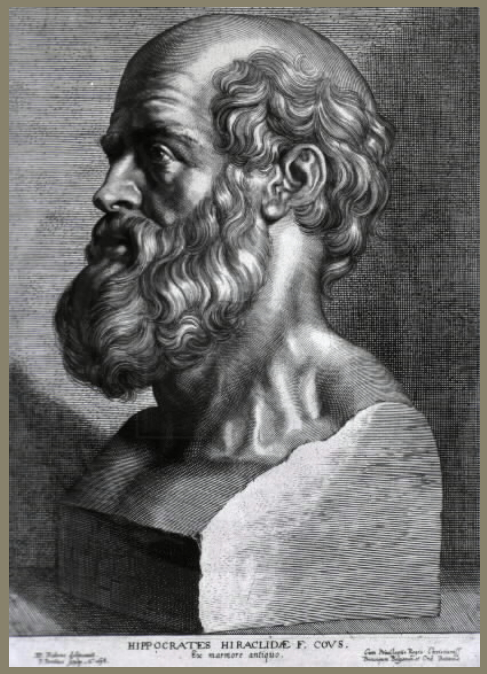
Many scholars believe this diorite head discovered at Susa represents king Hammurabi.

It is Babylonian from 2025-1594 B.C. and housed in Paris at the Louvre.

From: http://clendening.kumc.edu/dc/pc/index.html

“Code of Hammurabi”

Hippocrates 460 – 377 B.C.



Hippocrates, engraving by Peter Paul Rubens, 1638. Courtesy of the National Library of Medicine.

Hippocrates 460 - 377 B.C.
Aristotle 384 - 322 B.C.

Aristotle 384 - 322 B.C.

The Internet Encyclopedia of Philosophy

Claudius Galen 131- 201 AD

veterinarius and *equarius medicus*

The oldest complete veterinary work known today is the *Hippiatrika*.

ferrarious (ironworker, thus the farrier).

Apsyrtus of Constantinople
330 – 380 AD

Flavius Vegetius (383-450 AD)

Digestorum aris mulomedicinae libri IV

Vegetius Renatus 450 – 500 AD

The Dark Ages

The European Early Middle Ages (476-1000 AD)

The Black Death

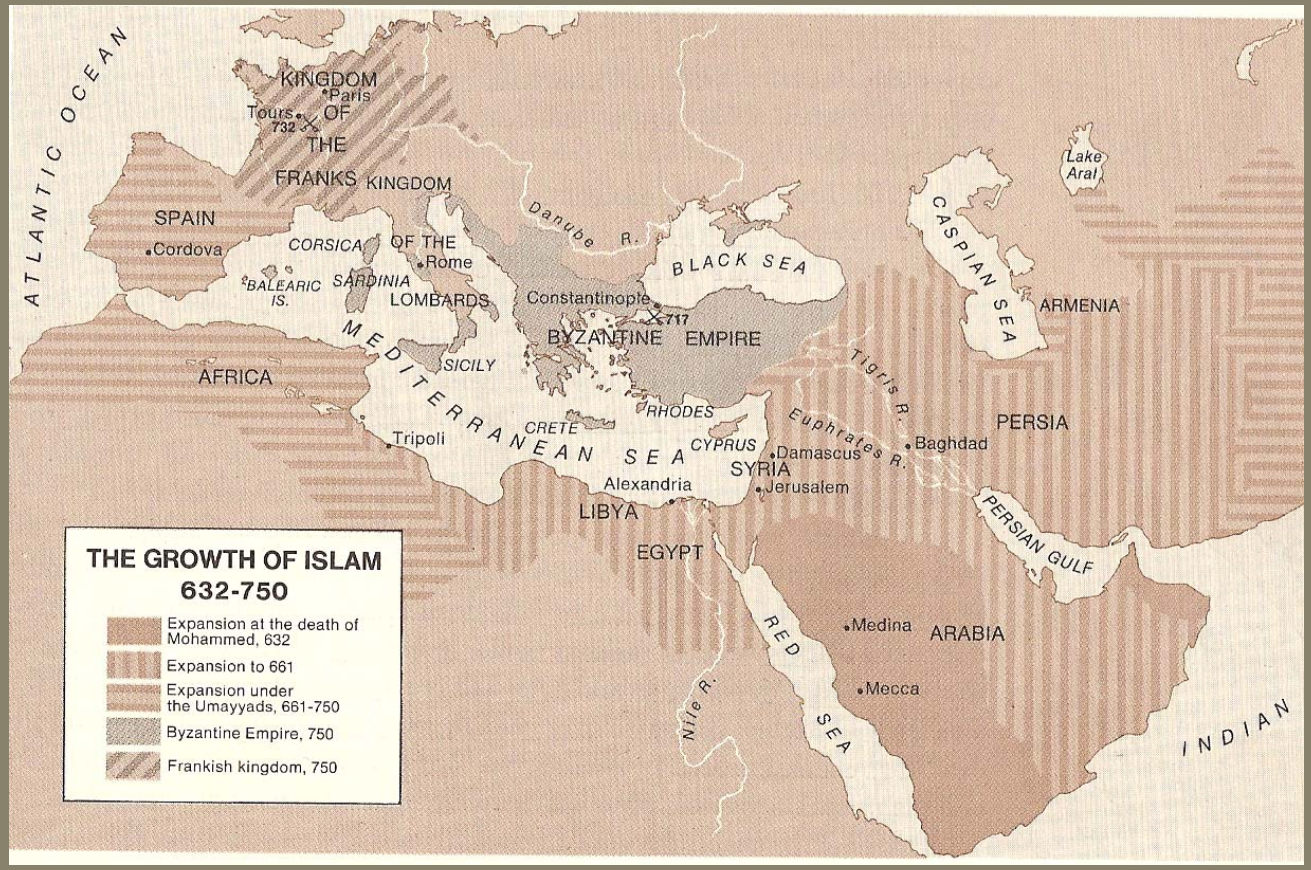
The first account is from Jean de Venette. While the plague was still active and spreading from town to town, men in Germany, Flanders, Hainault and Lorraine rose up and began a new sect on their own authority. Stripped to the waist, they gathered in large groups and bands and marched in procession throughout the crossroads and squares of cities and

good towns.

Courtesy of the Museum of Wisconsin Art, “The Flagellants” Carl von Marr (1858-1936) oil on canvas, on permanent loan to the Museum of Wisconsin Art, West Bend, WI from the City of Milwaukee Collection

These two close-up photos show more detail to this remarkable painting

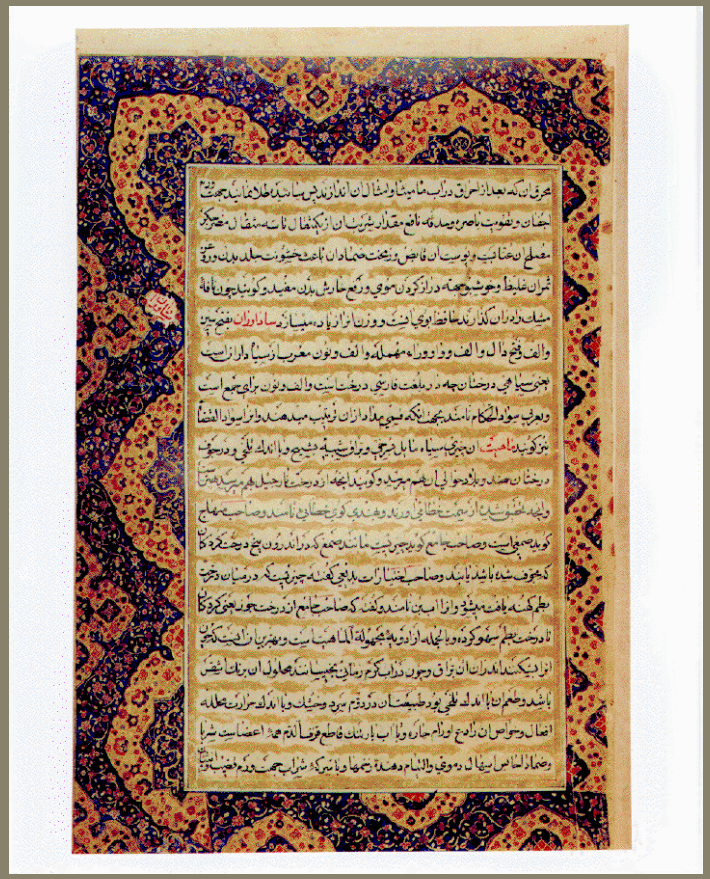
Six Centuries of Islamic Influence 660 – 1258


THE GROWTH OF ISLAM
632-750
Expansion at the death of Mohammed, 632
Expansion to 661
Expansion under the Umayyads, 661-750
Byzantine Empire, 750
Frankish kingdom, 750
ATLANTIC OCEAN
KINGDOM OF THE FRANKS
Paris
Tours
732
KINGDOM OF THE LOMBARDS
SPAIN
Cordova
CORSICA
SARDINIA
BALEARIC IS.
Rome
AFRICA
Tripoli
MEDITERRANEAN SEA
SICILY
CRETE
Danube R.
BLACK SEA
Constantinople
717
BYZANTINE EMPIRE
RHODES
CYPRUS
SYRIA
Damascus
Jerusalem
Alexandria
LIBYA
EGYPT
Nile R.
RED SEA
Medina
Mecca
ARABIA
Tigris R.
Euphrates R.
Baghdad
PERSIA
CASPIAN SEA
Lake Aral
ARMENIA
PERSIAN GULF
INDIAN

Books dealing with the natural science were enriched by the observations of Arab scientists.

Classic examples of Islamic manuscripts

Courtesy of the National Library of Medicine



Other examples of Islamic manuscripts

Courtesy of the National Library of Medicine

PHARMACOPŒA

PERSICA

EX IDIOMATE PERSICO

OPUS

ACCEDUNT IN FINE

IN ÆDIBUS PARISIENSIUM

M. DC. LXXXI

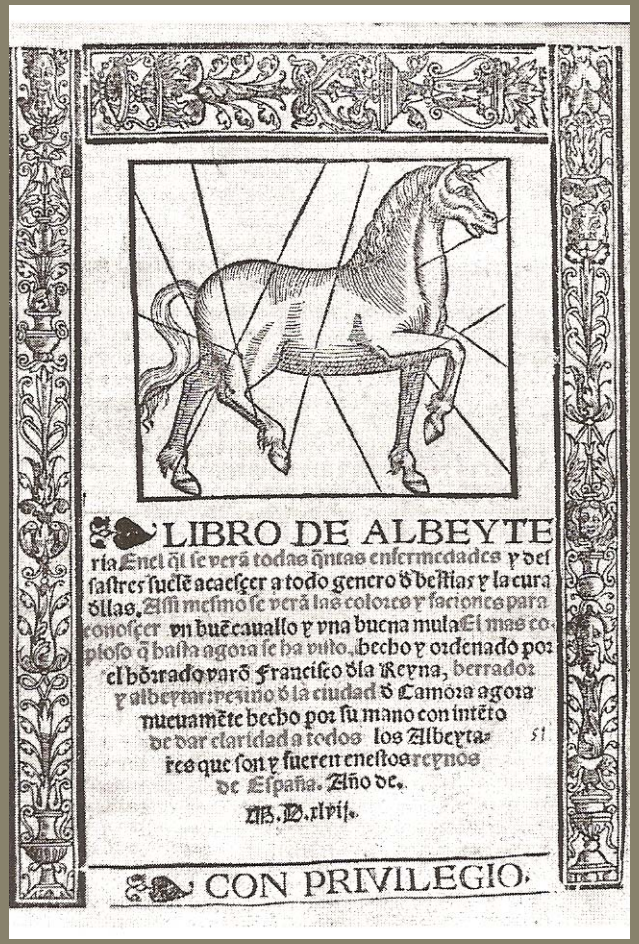
In 814, Arabs take over Indian numbers, including zero to multiply by ten.

In 975, the present arithmetical notion was brought into Europe by the Arabs.

During the twelfth (1100’s) century Arabic translations from the Greek were translated into Latin.

Latin scholars learned more of Aristotle by translating Arabic manuscripts based on Greek thought.

A copy of the first edition of the veterinary manual Libro De Albeyteria (1547) by Francisco de la Reyna



LIBRO DE ALBEYTE
ria En el q̃l se verã todas ẽntas enfermedades y des
sastres suele acaeçer a todo genero d̃ bestias y la cura
dellas. Assi mesmo se verã las colores y sacionces para
conoscer vn buẽ cauallo y vna buena mula El mas co
pioso q̃ hasta agora se ha visto. hecho y ordenado por
el bõrado varõ Francisco d̃la Reyna, herrador
y albeytar: vezino d̃ la ciudad d̃ Camora agora
nueuamẽte hecho por su mano con intẽto
de dar claridad a todos los Albeyta
res que son y fueren en estos reynos
de España. Año de.
M.D.xlvij.

CON PRIVILEGIO.

This is the only known printed copy of the first edition, in which Reyna, who postulated the circulation of the blood eighty years prior to Harvey's famous discovery.

Courtesy of Special Collections, Michigan State University Libraries.

Veterinary medicine, for example, before the development of the veterinary sciences during the eighteenth century, was called the veterinary art.

Veterinary medicine remained in the hands of farriers until the latter half of the eighteenth century.

Ecole Nationale
Vétérinaire
de Lyon

The first veterinary school was founded in Lyons, France, in 1761.

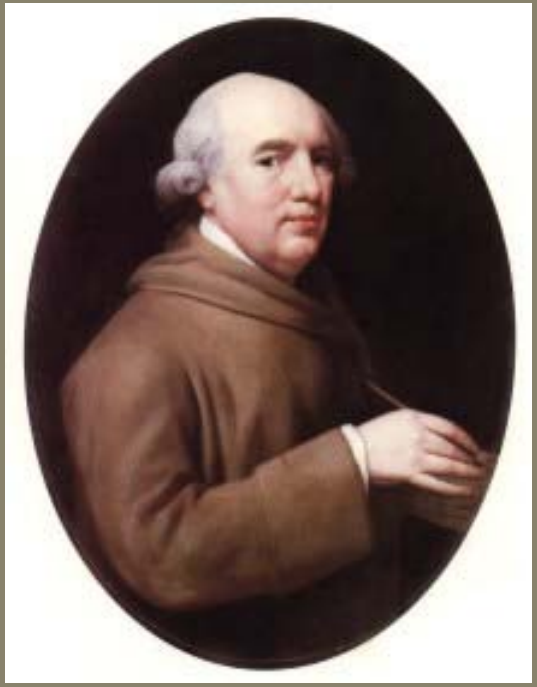
Ecole Nationale
Vétérinaire d'Alfort

The second school was
built in 1764 at Alfort, France.

George Stubbs – 1724-1806

London, England

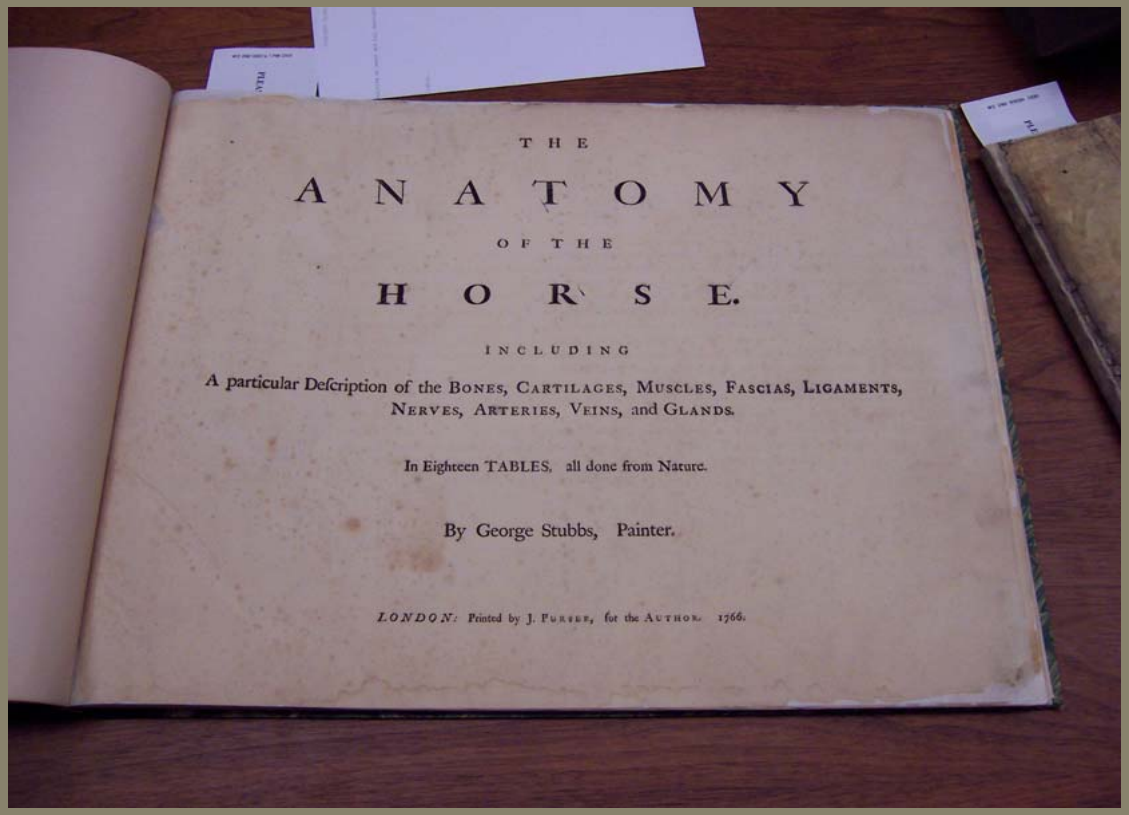
Self-portrait



George Stubbs - 1766

London, England

Courtesy of the National Library of Medicine



THE

ANATOMY

OF THE

HORSE.

INCLUDING

A particular Description of the BONES, CARTILAGES, MUSCLES, FASCIAS, LIGAMENTS, NERVES, ARTERIES, VEINS, and GLANDS.

In Eighteen TABLES, all done from Nature.

By George Stubbs, Painter.

LONDON: Printed by J. PURSER, for the AUTHOR. 1766.

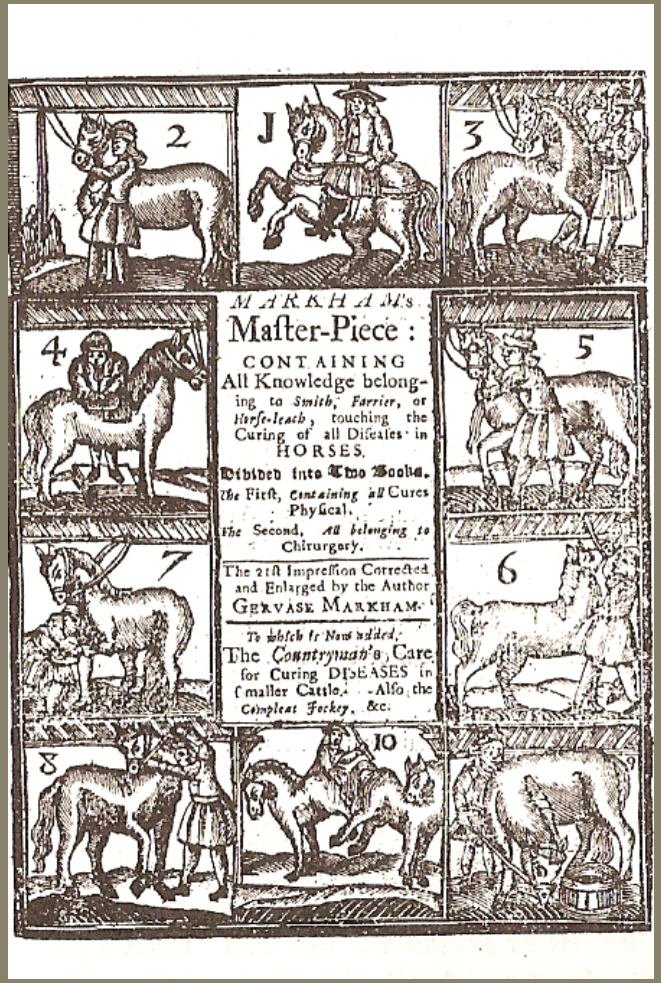
The History of Equine Medicine in America

Husband-man's Guide (1710), devoted a dozen pages to "The Experienced Farrier."

The Citizen and Countryman's Experienced Farrier (1764)
by J. Markham,G. Jeffries and Discreet Indians

Markham's Mafter-Piece (1610).

Markham's Mafter-Piece (1610)



MARKHAM's
Mafter-Piece:
CONTAINING
All Knowledge belonging to *Smith*, *Farrier*, or *Horse-leach*, touching the Curing of all Diseales in HORSES.
Divided into Two Books.
The First, *Containing all* Cures Physical.
The Second, *All belonging to* Chirurgery.
The 21ſt Impreſſion Corrected and Enlarged by the Author GERVASE MARKHAM.
To which is Now added,
The *Countryman's* Care for Curing DISEASES in ſmaller Cattle. Alſo the *Compleat Jockey*, &c.

Few serious animal diseases broke out in America before 1750.

There were no graduate veterinarians in America until the early 1800’s.

General George Washington

Here he is pictured, riding his saddle horse, known as Lindsay's Arabian, a beautiful, half-bred Arabian stallion

The following text will describe the common and acceptable treatment of the times.

- They relied on the three “B’s”of treatment: bleeding, blistering and burning.

President George Washington’s Death

The details are well documented.

(on December 12, 1799)

A Fleam, a blood-letting instrument used in Washington’s time, was used on his livestock.

Washington underwent additional treatment

Washington agreed with this procedure as a treatment, as this type of blood-letting was a common treatment used on his livestock at that time.

Washington’s Death

He died on Dec. 14, 1799, in his home at Mount Vernon, Virginia, at the age of 67.

Phlebotomy – blood-letting

It was a therapeutical measure of the most ancient healer.

Who is a phlebotomist today?

The First Veterinary School In The Americas Was In Mexico

Founded on August 17, 1853

National Autonomous University of Mexico

Early Veterinary Medical Education In North America Started In Canada

The two Canadian veterinary colleges were:

Ontario Veterinary School in Guelph, 1862
Montreal Veterinary College in 1866

Montreal Veterinary College founded in 1866 at McGill University

The Civil War 1861- 1865

Because of the lack of trained veterinarians, care for the animals on which the country depended fell to charlatans, stock owners and farriers.

This devastating disease was Glanders.

By the end of the Civil War, the Union had developed a greater respect for the trained veterinarians.

The Civil War was a defining moment in veterinary history.

The United States Civil War began on April 12, 1861 and ended four years later.

The Civil War and the Horse

The officer’s pride in his horse ran
deep on both sides of this horrific war.

Famous horses of the American Civil War and the senior officers who rode them:

Baldy (also Old Baldy) George G. Meade (favorite horse, wounded at First Bull Run and at Battle of Antietam)
Lucy Long Robert E. Lee (secondary)
Brown Roan Robert E. Lee (secondary)
Ajax Robert E. Lee (secondary)
Richmond Robert E. Lee (secondary)

Lexington William T. Sherman (favorite)
Dolly William T. Sherman (secondary)
Lancer George Armstrong Custer (favorite)
Don Juan George Armstrong Custer (secondary)
Methuselah Ulysses S. Grant
(first horse on re-entering the Army in 1861
Rondy Ulysses S. Grant (first horse in battle)
Fox Ulysses S. Grant (secondary)
Jack Ulysses S. Grant (secondary)
Kangaroo Ulysses S. Grant (secondary)

Cincinnati Ulysses S. Grant
(favorite horse, acquired in 1864)

General Robert E. Lee and his famous horse Traveller

The Civil War was truly the turning point in the history of veterinary medicine in United States.

In 1863, there were only about
400 veterinarians in seven eastern states.

The United States Veterinary Medical Association was formed on June 10, 1863 at the Astor House in New York City.

Astor House, where the USVMA was formed June 10, 1863.

American Veterinary Review in 1877.

In 1915, this journal was purchased by the AVMA and became the Journal of the American Veterinary Medical Association.

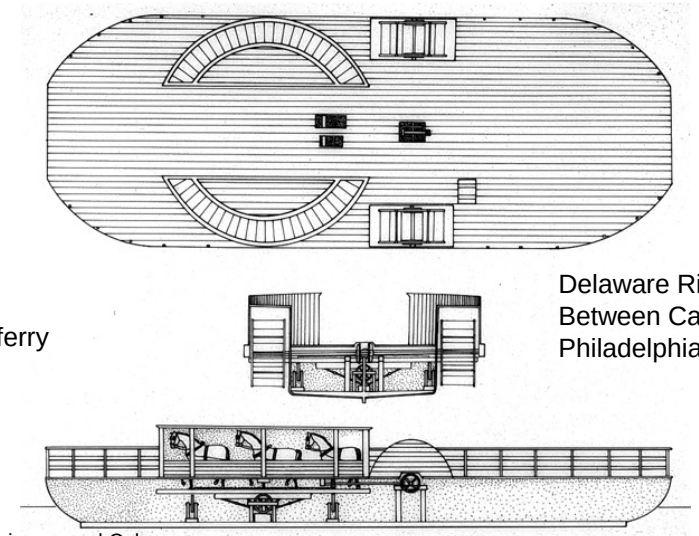
The USVMA changed its name in 1898, to the American Veterinary Medical Association.

The demand for horsepower world wide was overwhelming

Horse treadwheels

Trautwine's Six-Horse Horizontal-Treadwheel Ferry

(From Boyer, Annals of Camden, 1921)



Six-horse ferry

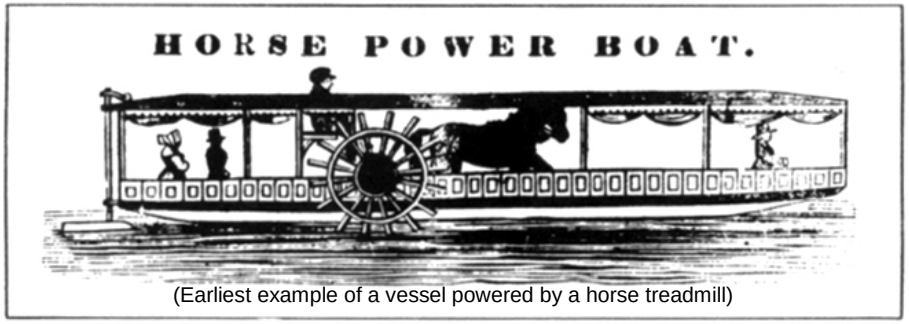
Delaware River Crossing Between Camden, NJ, Philadelphia, 1828.

Figure 18, Crisman and Cohn

The first one horse powered inboard power boat

Rufus Porter's Horse-Power Boat

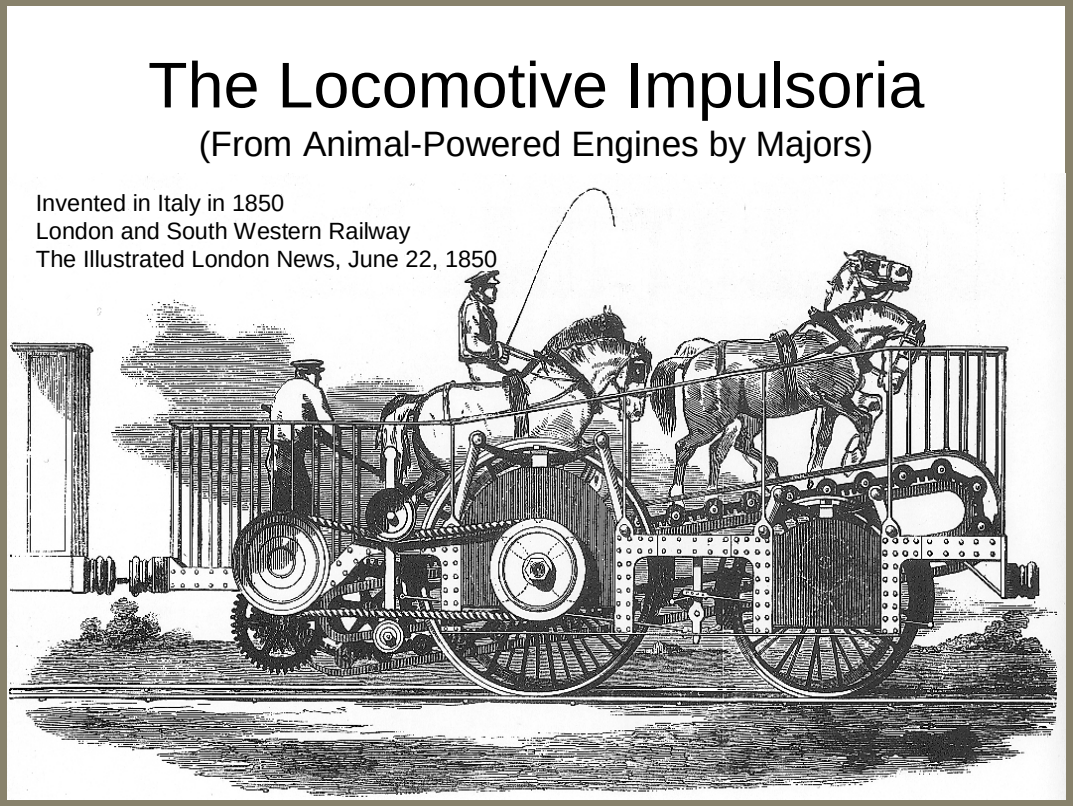
(From the American Mechanic, 24 September 1842)



(Earliest example of a vessel powered by a horse treadmill)

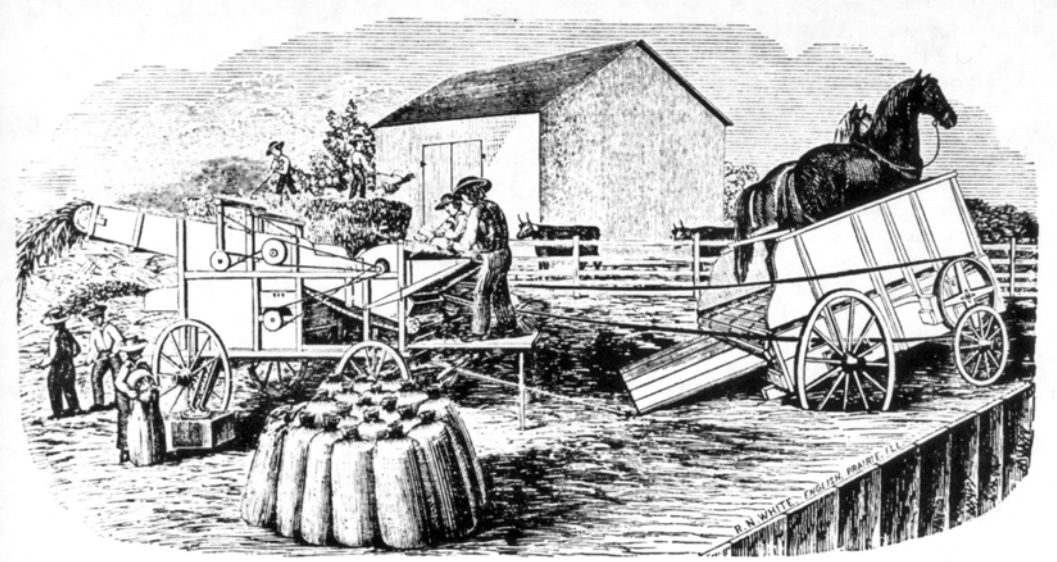
Figure 29. Rufus Porter's Horse Power Boat. From the *American Mechanic*, 24 September 1842. 9.1 meters in length by 1.8 meters in breadth, 9.6 km/hr, $200.

Developed in Italy in 1850 and started operation in London, June 22, 1850



This plate was taken from the Illustrated London News

A remarkable machine, able to power various types of equipment



Thresher powered by horse treadmill. From the J. I. Case catalogue, *c.*1855

From Farm Tools through the Ages by Michael Partridge, New York Graphic Society, Boston, 1973.

The Year 1880 - The Horse was The Supreme Symbol of Power

This was the age when veterinarians became known as “Horse Doctors.”

What was this new invention?

It was the bicycle!

The bicycle

J.K. Starley, in 1886 developed the Safety Bicycle.

Bicycling was then a predominantly middle-and upper-class activity.

One of the main benefits from this era of the bicycle was better roads.

The Twentieth Century was to be a period in which mechanical power was to become supreme.

America’s first veterinary surgeon was John Haslam.

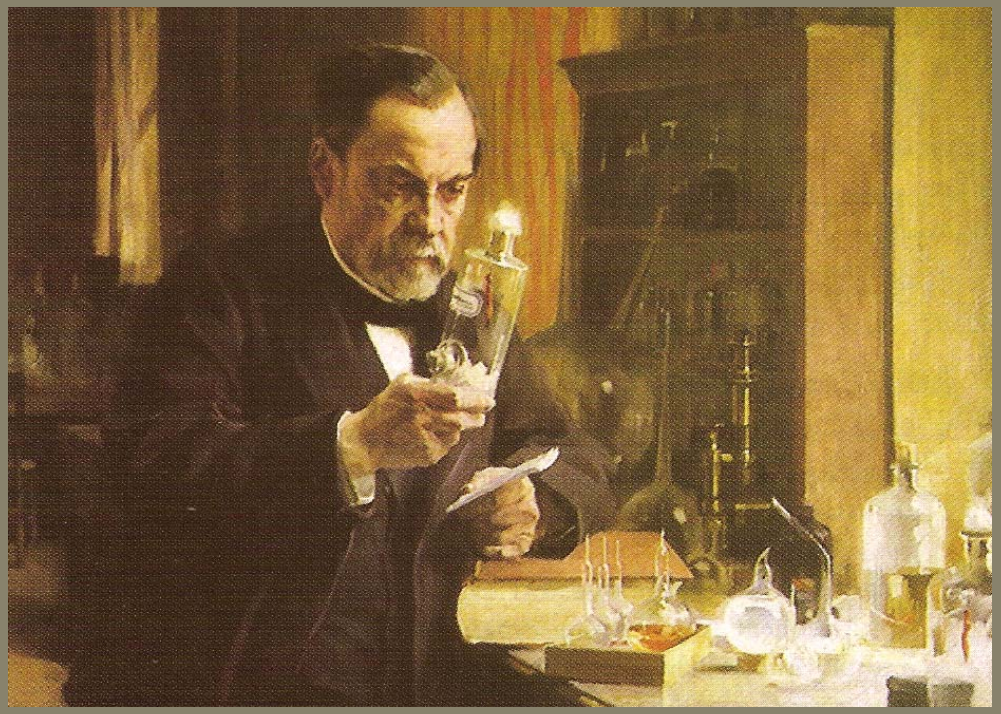
ANESTHESIA

This great achievement belongs to the nineteenth century:

Ether – 1842
Nitrous oxide – 1844
Chloroform - 1847

Dr. Louis Pasteur

Pasteur was a French microbiologist
who proved the germ theory of disease.



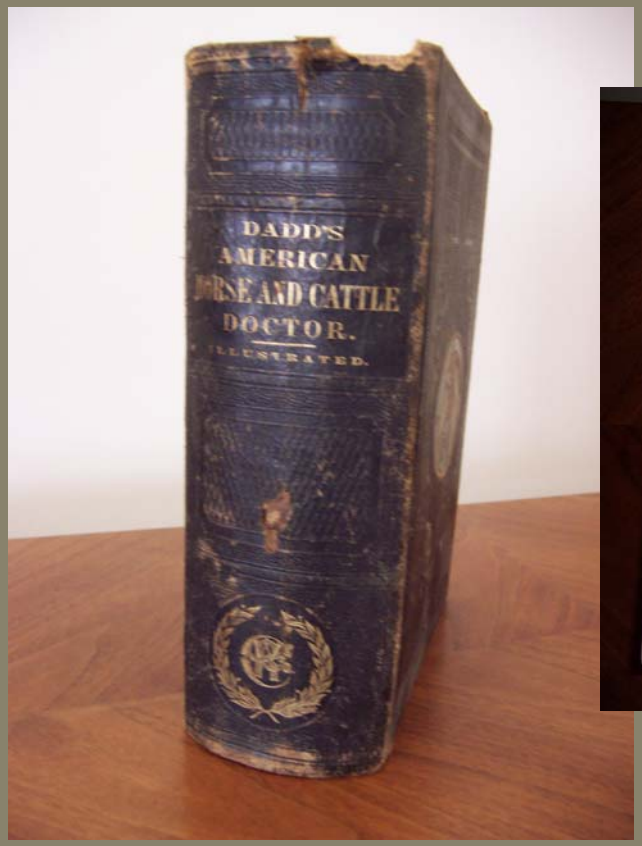
Dr. George Dadd, a British physician who emigrated to America and turned to veterinary practice about 1845.

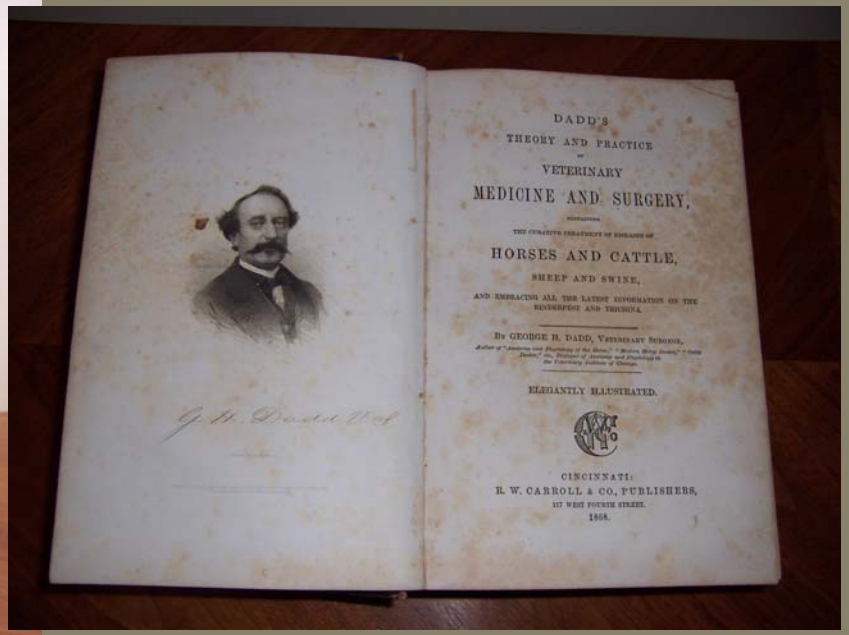
Dr. George Dadd, a British physician who emigrated to America and turned to veterinary practice about 1845, opened a proprietary school, the Boston Veterinary Institute, in 1855.

Dr. George Dadd also founded and edited the *American Veterinary Journal* (1851-1852; 1855-1859).

Dadd's Theory and Practice of Veterinary Medicine and Surgery – 1868

by George Dadd, Veterinary Surgeon





DADD'S
THEORY AND PRACTICE
OF
VETERINARY
MEDICINE AND SURGERY,
INCLUDING
THE CURATIVE TREATMENT OF DISEASES OF
HORSES AND CATTLE,
SHEEP AND SWINE,
AND EMBRACING ALL THE LATEST INFORMATION ON THE RINDERPEST AND TRICHINA.

BY GEORGE H. DADD, VETERINARY SURGEON,
Author of "Anatomy and Physiology of the Horse," "Modern Horse Doctor," "Cattle Doctor," the Professor of Anatomy and Physiology in the Veterinary Institute of Chicago.

ELEGANTLY ILLUSTRATED.

CINCINNATI:
R. W. CARROLL & CO., PUBLISHERS,
117 WEST FOURTH STREET.
1868.

The Early American Veterinary Medical Education

Veterinary medical education in America actually began with the establishment of private schools.

These private American veterinary colleges grew rapidly, here is a list of some of the most prominent schools:

American Veterinary College, 1875, in New York City (later merged with) and New York College of Veterinary Surgeons (1857-1899).
Chicago Veterinary College (1883-1920),
Kansas City (Missouri)Veterinary College (1891-1918),
McKillip Veterinary College (Chicago 1892-1920),
Indiana Veterinary College (Indianapolis 1892-1924),
Grand Rapids (Michigan) Veterinary College and
Saint Joseph's Veterinary College (Saint Joseph, Missouri)
and then, all of these closed by the year 1927.

Out of a total of 26 private veterinary schools, four of the most successful schools are listed below:

Chicago Veterinary College (2610)
Kansas City Veterinary College (1789),
McKillip Veterinary College (Chicago-1212)
Indiana Veterinary College (Indianapolis-884),
with about 6,495 graduates during their existence.
The remaining 22 schools had approximately 3,500 graduates between them, with an average of less than 200 graduates per school.
These schools depended entirely on student fees, offered a two-year curriculum and emphasized the study of the horse.

The Chicago Veterinary College

The Chicago Veterinary College, 2533-35-37-39 State Street, Chicago.

Then the curriculum in 1911, consisted of six and half months over three winter sessions, beginning in the middle of September of each year and ending in the middle of the following April.

One of the graduates from this college,
Dr. D. E. Baughman, who graduated in 1892,
became the founder and president of
Fort Dodge Laboratories, Fort Dodge, IA.

This college could be considered an American “international” veterinary college, as there were graduates from various foreign countries.

Dr. A.V. Curdumi (1909) Martinez, Guantanamo, Cuba
Dr. Dunn Platt (1910) San Juan, Porto Rico
Dr. F.M. De Mattos(1914) Taubate, South Paulo, Brazil, South America
Dr. J.A. Salcedo (1915) Asuncion, Paraguay, South America
Dr. J.A. Espindola (1909) Victoria, Argentine Republic, South America
Dr. M.A Bazan (1910) State Veterinarian, La Rioja, Argentine Republic, S.A.
Dr. A.A. Rodriquez (1910) Parana, Argentine Republic, South America
Dr. F. Gettler (1899) U.S. Army, Manila, Philippine Islands
Dr. Jas. Hill Jr. (1900) Manila, Philippine Islands
Dr. J.R. Shand, (1907) from Tientsin, China
The sad story of Suyenobu Ijichi, from Japan was in the Class of 1918-19, which didn't graduate, as the college closed in 1920.

The Chicago Veterinary College published this notice in 1915

1915

Openings for Veterinarians

IS the practice of veterinary science lucrative? What are the opportunities for Veterinarians? These questions are frequently asked.

The field of general practice in veterinary science is the least crowded of the professions, and applications for young graduates reach The Chicago Veterinary College yearly by the score. It is rarely that the College can fill a request for the reason that its graduates have locations in view prior to entering and nothing can induce them to change. General practice is very lucrative—the most lucrative of all branches of veterinary science.

Other opportunities that may be mentioned are:

In the Bureau of Animal Industry, United States Department of Agriculture, hundreds of veterinarians are employed as executives, inspectors, investigators and superintendents of quarantine stations at salaries ranging from $1,400 to $3,000 per annum.

Veterinary Colleges and State Agricultural Colleges are constantly seeking additional teachers, at salaries ranging from $1,200 to $3,000.

In the various States and Territories, State and Assistant State Veterinarians are employed at salaries ranging from $1,200 to $3,000.

In nearly all the large cities, and in many of the small towns, veterinarians are employed in the Health Department as inspectors of slaughter-houses, dairies and meat markets at good salaries.

In the Army there are two Veterinarians for each regiment of cavalry, the salary varying from $1,500 upwards, with perquisites.

Graduates of The Chicago Veterinary College may be found in all the branches of veterinary service outlined.

The Chicago Veterinary College notice read as follows:

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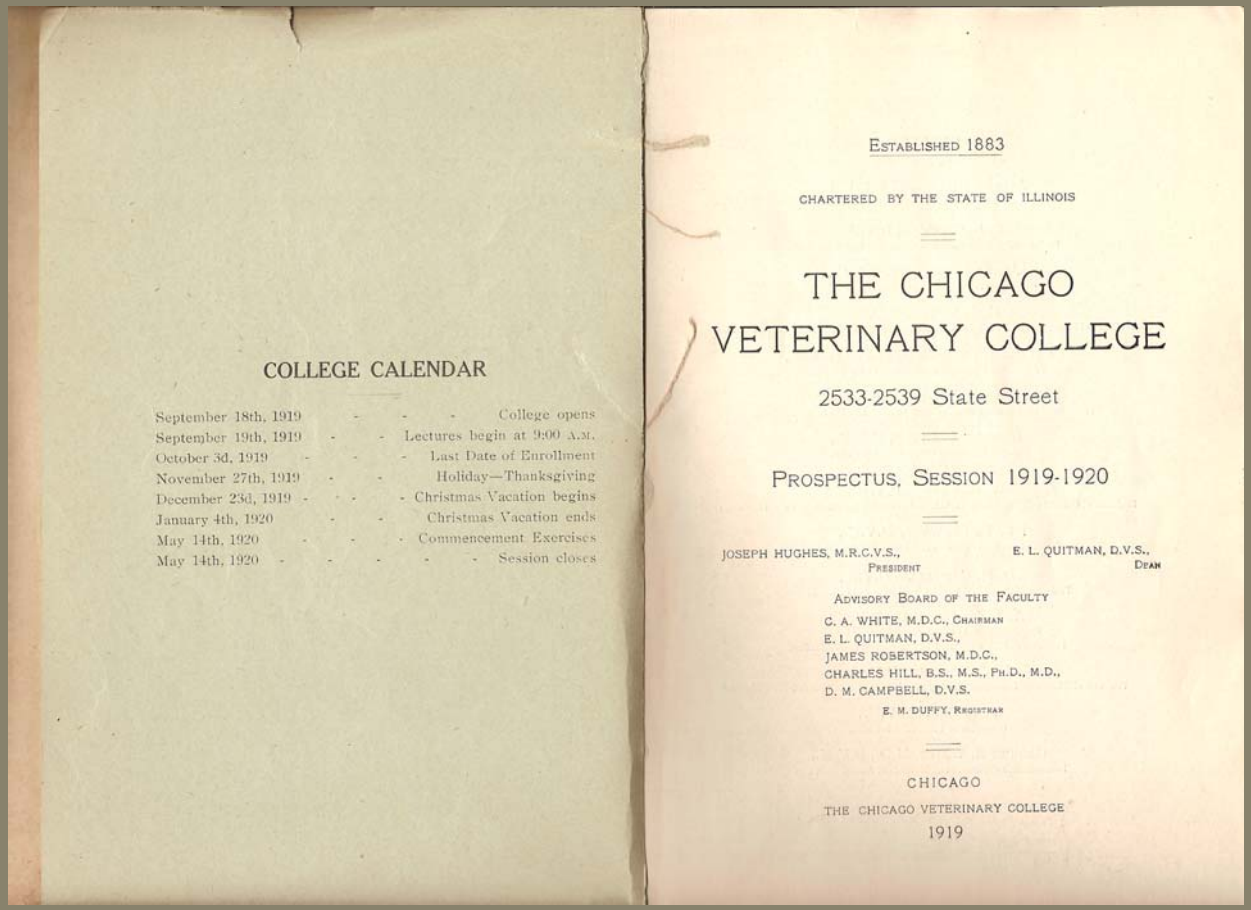
In 1916, the college adopted a four-year course, the sessions started yearly in September and ended in the following May.

The last prospectus, Session 1919-1920 of the Chicago Veterinary College



COLLEGE CALENDAR

September 18th, 1919	College opens
September 19th, 1919	Lectures begin at 9:00 A.M.
October 3d, 1919	Last Date of Enrollment
November 27th, 1919	Holiday—Thanksgiving
December 23d, 1919	Christmas Vacation begins
January 4th, 1920	Christmas Vacation ends
May 14th, 1920	Commencement Exercises
May 14th, 1920	Session closes

ESTABLISHED 1883

CHARTERED BY THE STATE OF ILLINOIS

THE CHICAGO VETERINARY COLLEGE

2533-2539 State Street

PROSPECTUS, SESSION 1919-1920

JOSEPH HUGHES, M.R.C.V.S., PRESIDENT

E. L. QUITMAN, D.V.S., DEAN

ADVISORY BOARD OF THE FACULTY

C. A. WHITE, M.D.C., CHAIRMAN
E. L. QUITMAN, D.V.S.,
JAMES ROBERTSON, M.D.C.,
CHARLES HILL, B.S., M.S., PH.D., M.D.,
D. M. CAMPBELL, D.V.S.

E. M. DUFFY, REGISTRAR

CHICAGO

THE CHICAGO VETERINARY COLLEGE

1919

The last of the private veterinary schools was the United States College of Veterinary Surgeons in Washington, D.C. (1894) and it was suspended in 1927.

With the influence of these 26 independent veterinary schools during those 70 years, they were for the most part, products of the industrial revolution.

What were the major reasons the private veterinary schools had to close?

Seven of the most important reasons:

(1) In 1879, the War Department developed a policy, which required new veterinarians they employed to be graduates of established and reputable schools or colleges.

(2) The Department of Agriculture followed suit in 1894, and in 1897 included the requirement that the applicant's alma mater have a three-year curriculum.

(3) In the 1890's, an economic depression was in place.

(4) The fear of the popular bicycle would replace the pleasure horse.

(5) More importantly was the drop of enrollments in the private colleges. Due in part of the rise of urban employment that was abundant, and the need of a four-year education in a profession the might not exist in the very near future.

(6) The AVMA made two bold moves, first in 1906 they began a program of accreditation process, visiting and reviewing some of the veterinary schools. Then in 1910, the AVMA developed a proposal to upgrade its membership requirements, such as new members must be graduates of schools that required at least two years of high school education for entry and had a four-year college curriculum, which Iowa State had been the first to implement in 1903.

(7) Lastly, all in all, there were 26 independent veterinary schools between 1852 and 1927. The private veterinary schools of the 19th and early 20th centuries were, for the most part, products of the industrial revolution; such schools were founded because of a need for veterinarians created by an ever-increasing demand for horse power. Then changes of World War I drove the developing force of the “machine age,” which in turn was the end of the horse age. After the war, few of the private schools could survive.

After 1913, schools began to drop off the AVMA approved list, either due to closure or failure to maintain sufficiently high standards. By 1927, all of the private veterinary colleges had closed.

The horse was the animal that received the greatest attention from the U.S. practitioners during the first three quarters of the nineteenth century, since it supplied most of the power needed for transportation and farming.

The Morrill Land-Grant Agricultural Act was passed in July 2, 1862, which enhanced government funding of certain schools.

Iowa State College became the first school to establish a distinct veterinary college with Land-Grant money in 1879.

The resurgence of the profession began with increased enrollment in 1928.

They were as follows:

Iowa State College in 1879

(Iowa State College became the first school to establish a distinct veterinary college with Land-Grant money.)

University of Pennsylvania in 1883 and in 1885, opened a veterinary hospital.

(Since horses were the primary patients, a blacksmith shop was attached to the hospital.)

Ohio State University in 1885

Cornell University in 1894

Washington State University in 1895

Kansas State College in 1905

(In 1918, Kansas City Veterinary College (1891) in Missouri was absorbed by KSC and was believed to be by many, the greatest private veterinary school in the nation)

Auburn University in 1906

Michigan State College in 1910

(Michigan State College was established in 1855)

Texas A&M College in 1916

A veterinary college was established in connection with Minnesota College Hospital in 1881

(University of Minnesota Veterinary School began as a Division of Veterinary Medicine in the College of Agriculture in 1916)

University of Minnesota Veterinary Hospital

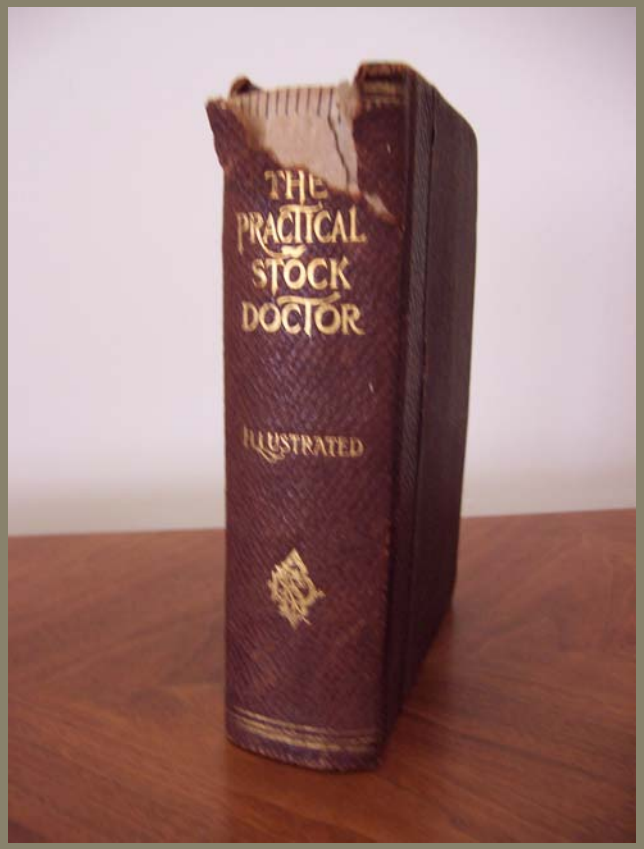
The original University of Minnesota Veterinary Hospital on the St. Paul Campus near the site of "Old Anatomy" as it looked circa 1900.

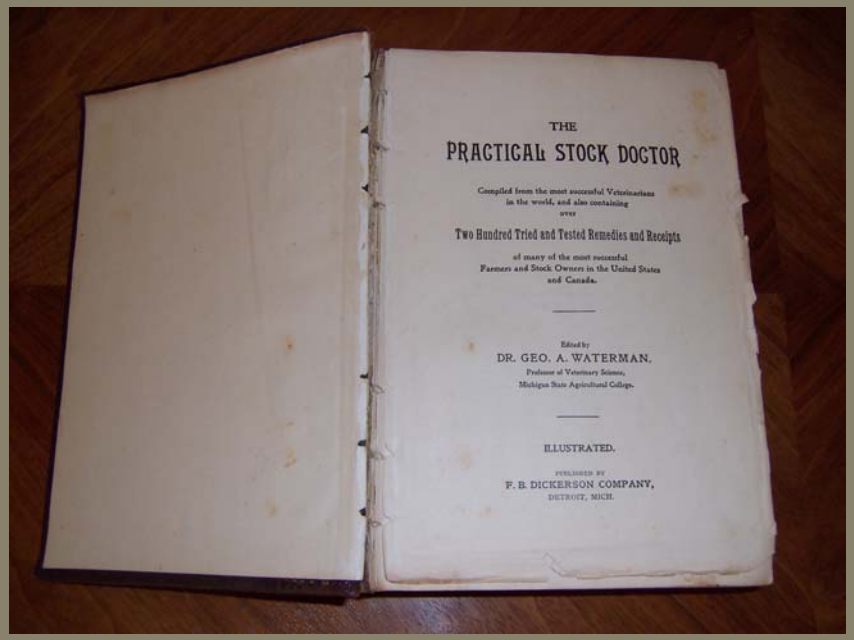
Two very popular illustrated textbooks were available between 1868 and 1904

- Dadd's Theory and Practice of Veterinary Medicine and Surgery – 1868
  by George Dadd, Veterinary Surgeon
- The Practical Stock Doctor – 1904
  by Dr.George A.Waterman, Professor of Veterinary Science, Michigan State College

The Practical Stock Doctor – 1904

by Dr.George A.Waterman, Professor of Veterinary Science, Michigan State College





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DR. GEO. A. WATERMAN,

Professor of Veterinary Science, Michigan State Agricultural College.

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This is to Certify, *that* Julius Topp *has purchased a copy of "The Practical Stock Doctor," and that he is entitled to free consultation concerning the diseases or symptoms of any domestic animals owned by himself, wife, or any member of his family only, for five years, from and after the year printed on the title page of this book.*

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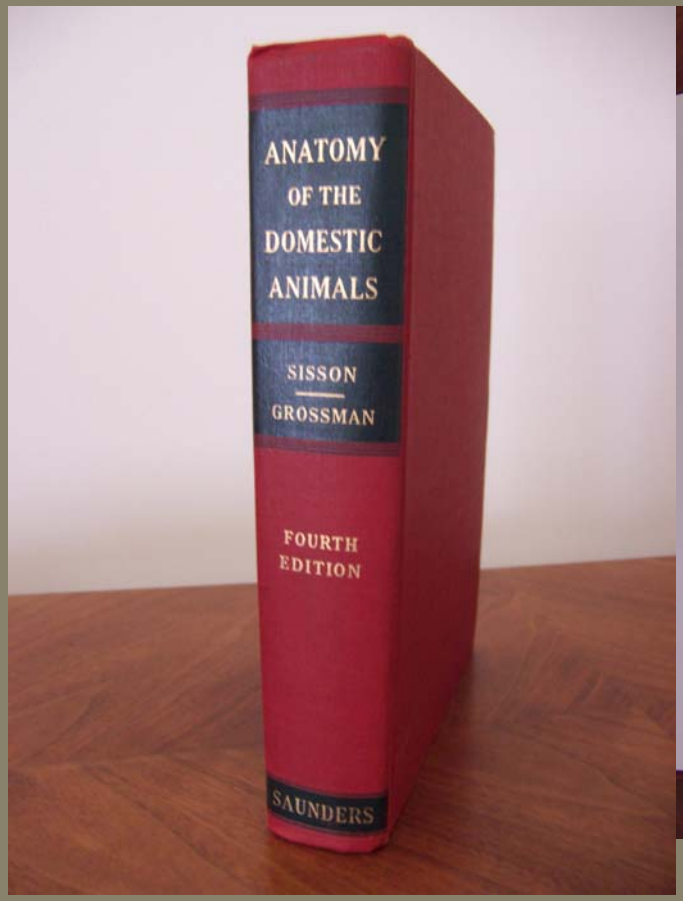
By Angele J. Scandell Agent

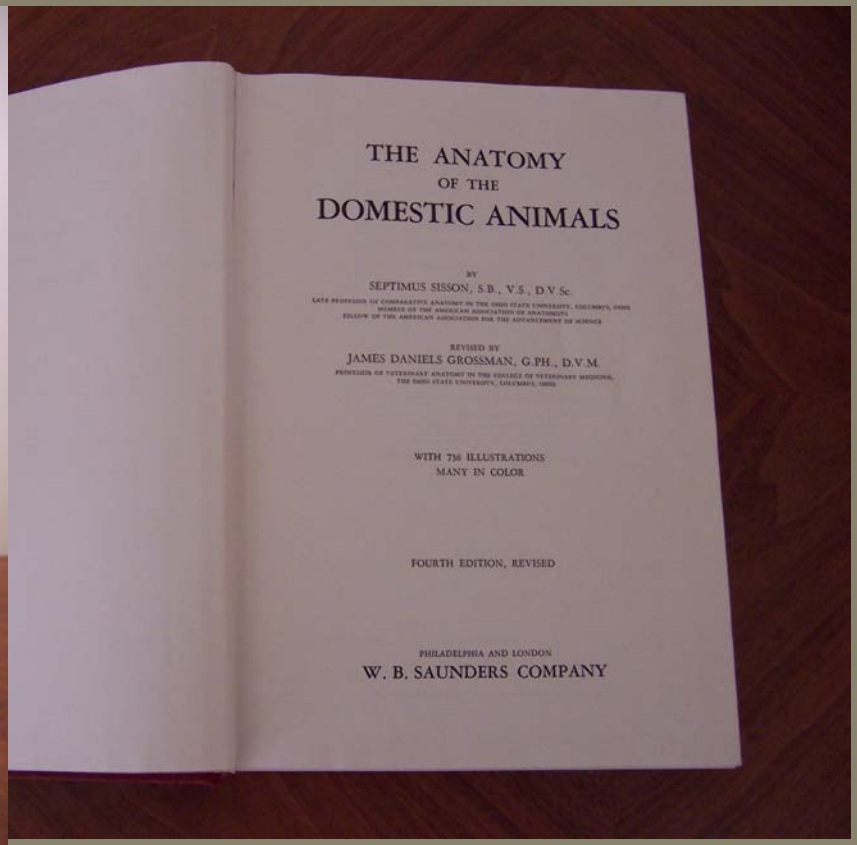
NOTICE.—We have arranged with three of the best Veterinarians in the country, to whom all inquiries will be promptly submitted for reply. In making inquiry observe the following: *First*—Address all communications to the home office, F. B. DICKERSON CO., Detroit, Michigan. *Second*—Give the name of the agent above. *Third*—State fully and plainly the symptoms, how the animal acts, etc. *Fourth*—Be sure to give your name and address. *Fifth*—If any purchaser of this book has any remedy or receipt not already in the book, that he has thoroughly tested and knows to be valuable, we ask him to send it to us that we may print it. Our aim is to make this the most practical, valuable book for the farmer ever published.

PUBLISHERS

In 1910, the classic anatomy veterinary text was first published, *The Anatomy of the Domestic Animals* by Septimus Sisson, S.B. V.S., D.V.Sc. This text was the “bridge” that made the transition from the study of the horse to the study of domestic animals so smoothly and no one was aware.

The Anatomy of the Domestic Animals
by Septimus Sisson, S.B. V.S., D.V.Sc.





THE ANATOMY
OF THE
DOMESTIC ANIMALS

BY
SEPTIMUS SISSON, S.B., V.S., D.V.Sc.
LATE PROFESSOR OF COMPARATIVE ANATOMY IN THE OHIO STATE UNIVERSITY, COLUMBUS, OHIO
MEMBER OF THE AMERICAN ASSOCIATION OF ANATOMISTS
FELLOW OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

REVISED BY
JAMES DANIELS GROSSMAN, G.PH., D.V.M.
PROFESSOR OF VETERINARY ANATOMY IN THE COLLEGE OF VETERINARY MEDICINE,
THE OHIO STATE UNIVERSITY, COLUMBUS, OHIO

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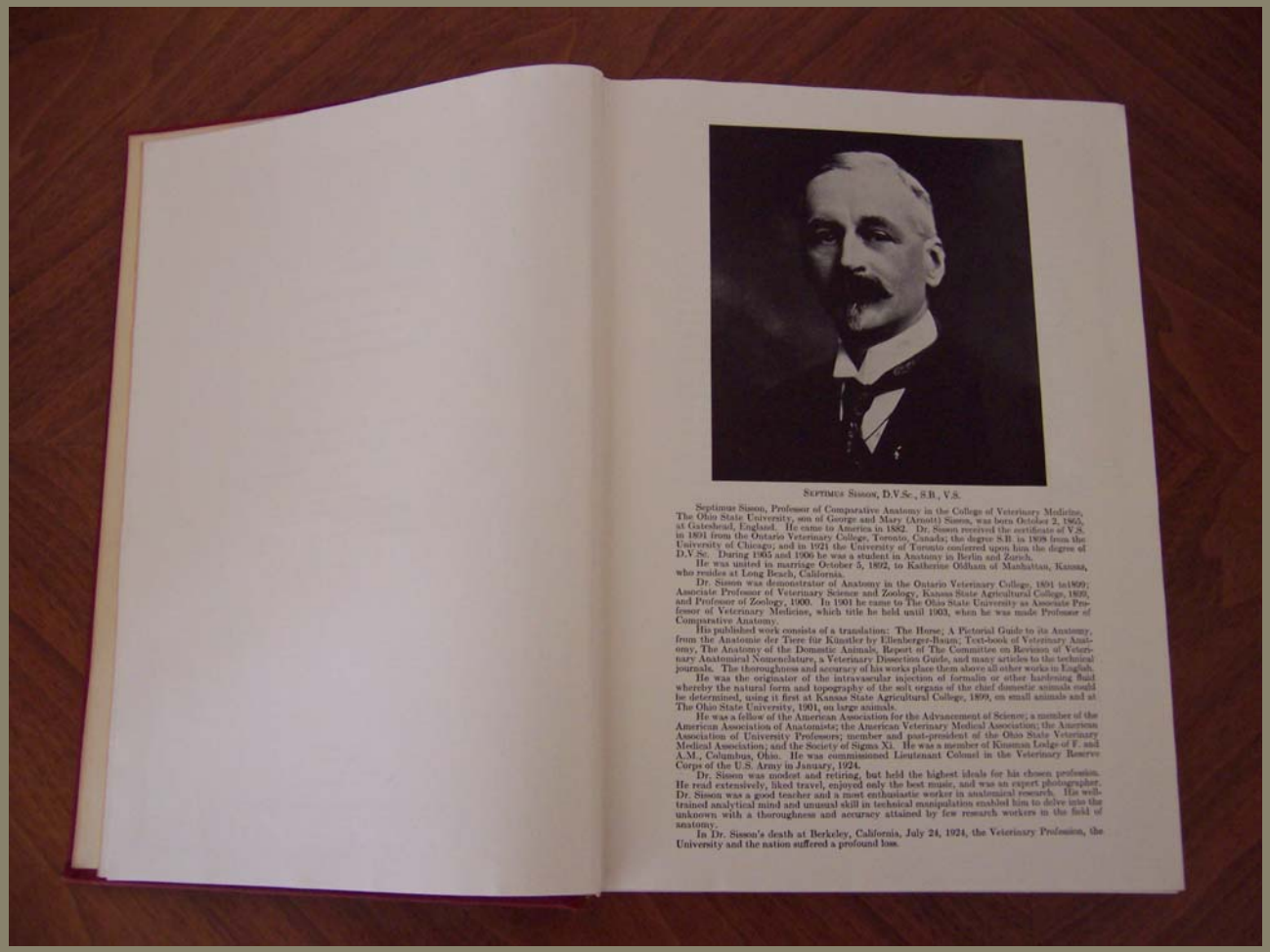
Dr. Septimus Sisson



SEPTIMUS SISSON, D.V.Sc., S.B., V.S.

Septimus Sisson, Professor of Comparative Anatomy in the College of Veterinary Medicine, The Ohio State University, son of George and Mary (Arnott) Sisson, was born October 2, 1865, at Gateshead, England. He came to America in 1882. Dr. Sisson received the certificate of V.S. in 1891 from the Ontario Veterinary College, Toronto, Canada; the degree S.B. in 1898 from the University of Chicago; and in 1921 the University of Toronto conferred upon him the degree of D.V.Sc. During 1905 and 1906 he was a student in Anatomy in Berlin and Zurich.

He was united in marriage October 5, 1892, to Katherine Oldham of Manhattan, Kansas, who resides at Long Beach, California.

Dr. Sisson was demonstrator of Anatomy in the Ontario Veterinary College, 1891 to1899; Associate Professor of Veterinary Science and Zoology, Kansas State Agricultural College, 1899, and Professor of Zoology, 1900. In 1901 he came to The Ohio State University as Associate Professor of Veterinary Medicine, which title he held until 1903, when he was made Professor of Comparative Anatomy.

His published work consists of a translation: The Horse; A Pictorial Guide to its Anatomy, from the Anatomie der Tiere für Künstler by Ellenberger-Baum; Text-book of Veterinary Anatomy, The Anatomy of the Domestic Animals, Report of The Committee on Revision of Veterinary Anatomical Nomenclature, a Veterinary Dissection Guide, and many articles to the technical journals. The thoroughness and accuracy of his works place them above all other works in English.

He was the originator of the intravascular injection of formalin or other hardening fluid whereby the natural form and topography of the soft organs of the chief domestic animals could be determined, using it first at Kansas State Agricultural College, 1899, on small animals and at The Ohio State University, 1901, on large animals.

He was a fellow of the American Association for the Advancement of Science; a member of the American Association of Anatomists; the American Veterinary Medical Association; the American Association of University Professors; member and past-president of the Ohio State Veterinary Medical Association; and the Society of Sigma Xi. He was a member of Kinsman Lodge of F. and A.M., Columbus, Ohio. He was commissioned Lieutenant Colonel in the Veterinary Reserve Corps of the U.S. Army in January, 1924.

Dr. Sisson was modest and retiring, but held the highest ideals for his chosen profession. He read extensively, liked travel, enjoyed only the best music, and was an expert photographer. Dr. Sisson was a good teacher and a most enthusiastic worker in anatomical research. His well-trained analytical mind and unusual skill in technical manipulation enabled him to delve into the unknown with a thoroughness and accuracy attained by few research workers in the field of anatomy.

In Dr. Sisson's death at Berkeley, California, July 24, 1924, the Veterinary Profession, the University and the nation suffered a profound loss.

In 1898, the American Veterinary Medical Association was formed, it is the largest veterinary organization in the world.

World War One

Horses were heavily used in World War One. Horses were involved in the war's first military conflict involving Great Britain - a cavalry attack near Mons in August 1914. Horses were primarily to be used as a form of transport during the war.

Horses pulling artillery when the war broke out in Western Europe in August 1914. Both Britain and Germany had a cavalry force, each numbered about 100,000 men.

In August 1914, no one could have contemplated the horrors of trench warfare – hence the cavalry regiments reigned supreme.

Trench warfare made such charges not only impractical but impossible.

In March 1918, the British launched a cavalry charge at the Germans. By the Spring of 1918, the war had become more fluid, but despite this, out of 150 horses used in the charge only 4 survived.

Germans advancing on horseback to the Marne, such was the use of horses on the Western Front.

Over 8 million died on all sides fighting in this war.

Military vehicles, as with any mechanized vehicles of the time, were relatively new inventions and prone to problems. Horses, along with mules, were reliable forms of transport, when compared to a truck, as these animals needed little upkeep.

World War One started in the summer of 1914, Italy joined the Allies in May 3, 1915

The Italian Army veterinary corps started with 219 veterinarians and by at the end of the war they totaled 2819.

On April 22, 1915, Germany started using chlorine gas and a new type of warfare began. The Allied defenders had no protective equipment. Within a few months, equipment was obtained for the soldiers, including the efforts of the veterinarians in the field in developing gas masks to protect the horses on the war front.

The Army Veterinary Corp

Since the signing of the Declaration of Independence until the passage of the National Defense Act of June 3, 1916, this act profoundly modified that service. The Act of the Congress, in 1792, provided for mounted troops and continue chronologically with Acts of Congress, War Department orders, department and regimental regulations affecting the mounted service and the veterinarians of the army down to this eventful day in 1916.

The Army Veterinary Corp, in 1916 became a branch of the Army Medical Department and commissioned rank was granted to the army veterinarians. They had been under the Army Quartermaster Department and regiments since 1792.

Glanders

In 1902, John Rutherford succeeded McEachran as chief veterinary inspector; in 1904, he was appointed veterinary director general, at the head of the newly formed Health of Animals Branch of the Department of Agriculture. Early in the century, Rutherford was instrumental in establishing the policies and procedures that would lead to the eventual eradication of glanders.

Through these policies and procedures in the control of Glanders that were developed by an alert veterinary profession, they had practically eliminated that dread disease from our country by 1913.

This is but one example of what America’s competent veterinary profession means to human health, over and above its service in safeguarding the health of animals.

Glanders Epidemic – Russia, 1925

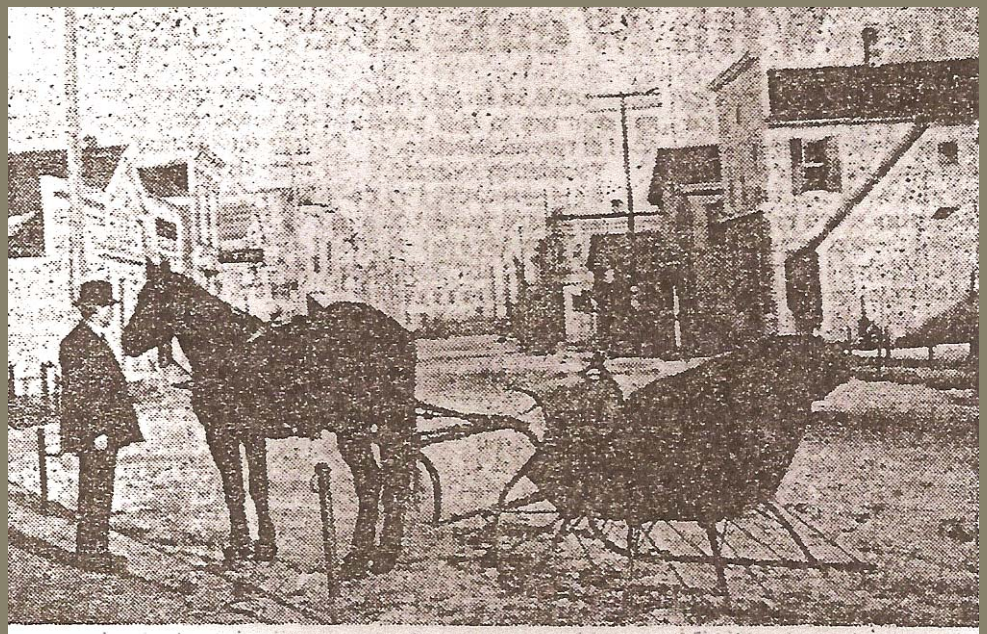
Appalling as the thought must seem to Americans, so helpless was Russia to cope with the disease know as Glanders, after the revolution had "liquidated" its veterinary profession, that in 1925 the Soviet Red Gazette announced that "for humanitarian and sanitary reasons" the authorities had shot 117 children who had contracted the disease from horses afflicted with it.

Some Historic Facts About Glanders

- In the 3rd Century BC, Aristotle described Glanders in his writings.
- In 1664, the contagious nature was recognized.
- In 1900, control programs were implemented in the United States.
- In 1917, the Germans again were accused of spreading glanders to 4,500 donkeys on the French front, and of spreading this plague on the Russian front in 1915 and 1916.
- Large number of human cases in Russia occurred during and after World War I.
- In 1934, Glanders was eliminated from animals in the U.S.

Private veterinary practice in the early 1900’s is pictured in the following photos:

Dr. O.J. Matthias has his horse and cutter ready to go in front of the Franklin House on Pine Street in Sheboygan Falls in 1905 and in a buggy in the summer, until 1911 when he bought a new Hopmobile.

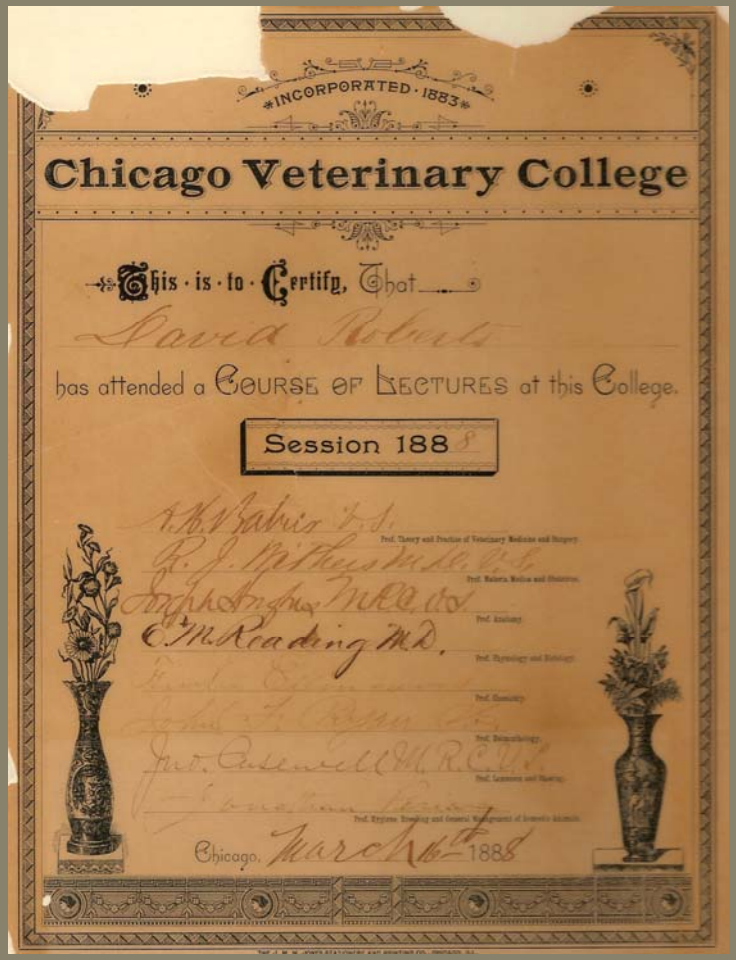


DR. O.J. MATTHIAS has his horse and cutter ready to go in front of the Franklin House on Pine Street in Sheboygan Falls in 1905.

Dr. David Roberts,
Waukesha, WI - 1900

Dr. David Roberts and His Arabian Team, 1900.

Dr. David Roberts graduated from the Chicago Veterinary College in 1889


INCORPORATED · 1883

Chicago Veterinary College

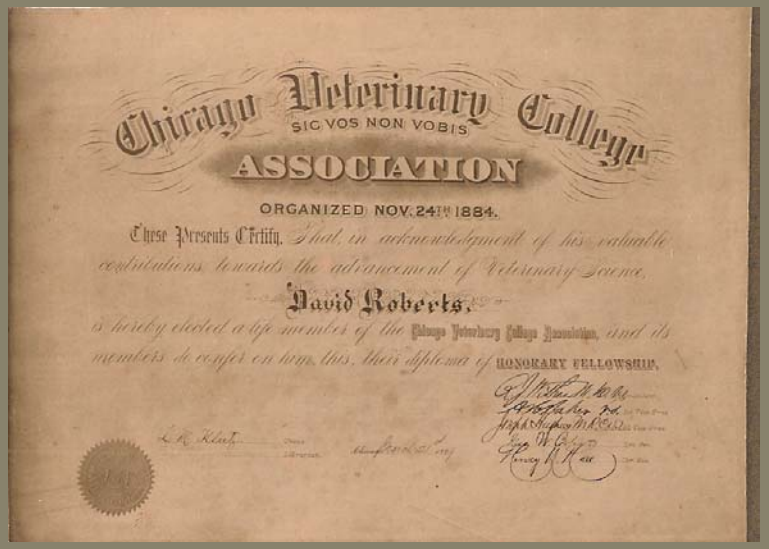
This · is · to · Certify, That

David Roberts

has attended a Course of Lectures at this College.

Session 1888

Chicago, March 16th 1888


Chicago Veterinary College

SIC VOS NON VOBIS

ASSOCIATION

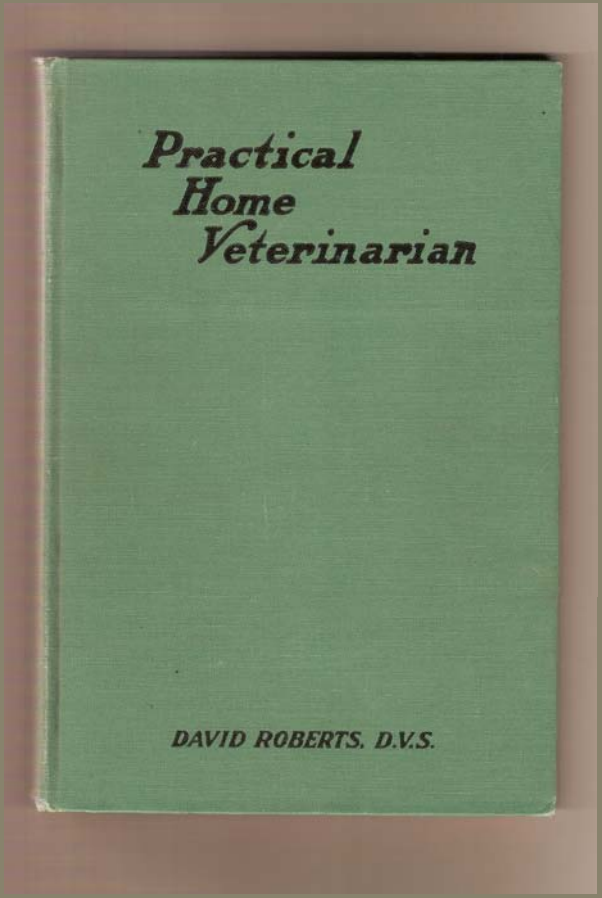
ORGANIZED NOV. 24TH 1884.

These Presents Certify, That, in acknowledgment of his valuable contributions towards the advancement of Veterinary Science,

David Roberts,

is hereby elected a life member of the Chicago Veterinary College Association, and its members do confer on him, this, their diploma of HONORARY FELLOWSHIP.

Dr. David Roberts’
popular veterinary book,
first published in 1910, which sold for $1.00



Title page of the Practical Home Veterinarian

Dr. David Roberts Starting Out on a Special Dairy Train.

Dr. David Roberts Addressing Live Stock Breeders on Diseases of Cattle from Special Dairy Train.

2

Dr. David Roberts' Practical Home Veterinarian

A BOOK CONTAINING

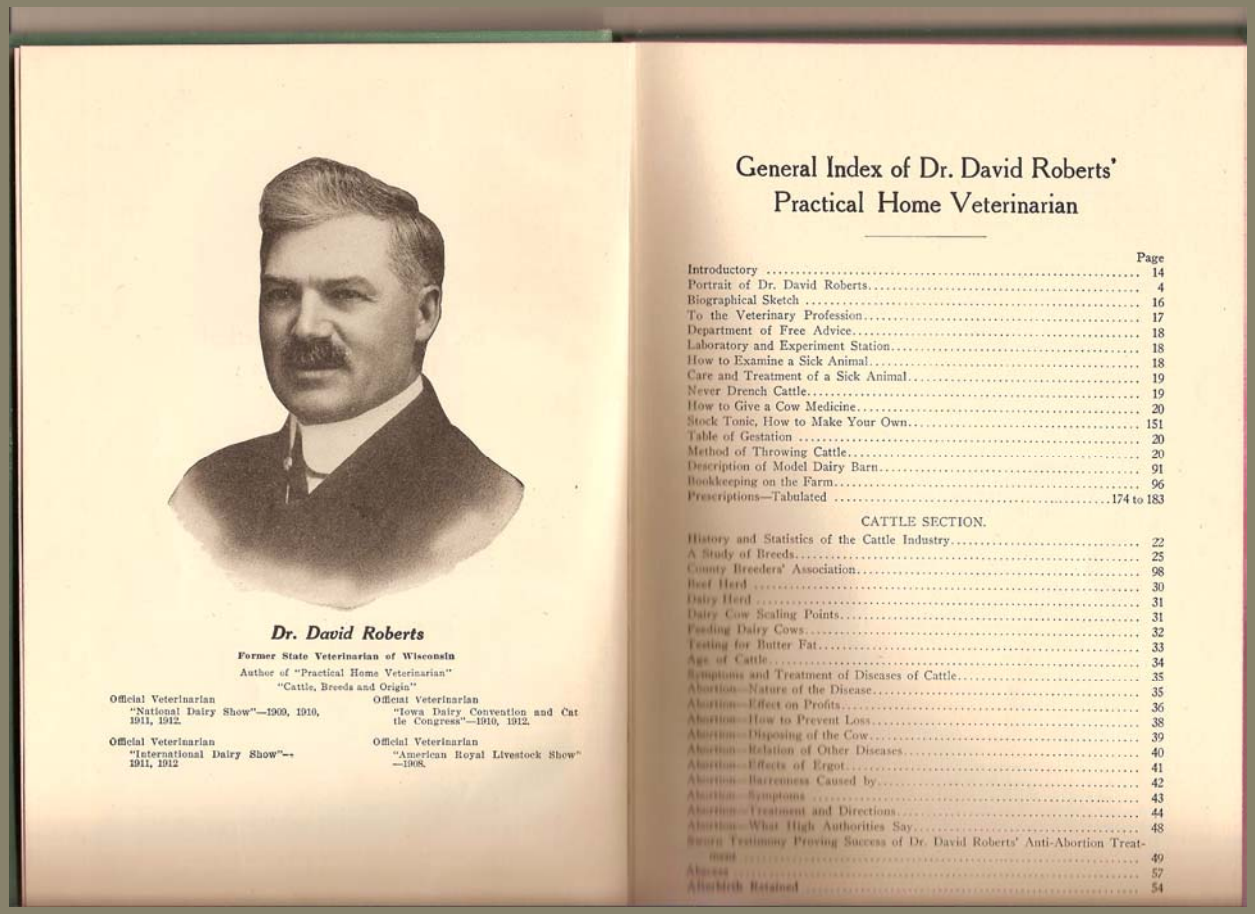
much valuable information on the care and treatment of Cattle, Horses, Swine, Sheep and Poultry, and a review in alphabetical order of the diseases to which they are subject, together with the causes and symptoms, and the most efficient medicines for each. Also illustrations of a model dairy barn, different breeds of cattle and horses, and modern methods of administering treatment.

Written and Compiled by

DAVID ROBERTS, D. V. S.,

WAUKESHA, WIS.

Photo of Dr. David Roberts and the first page of the General Index of the Practical Home Veterinarian



Dr. David Roberts

Former State Veterinarian of Wisconsin

Author of "Practical Home Veterinarian"
"Cattle, Breeds and Origin"

Official Veterinarian
"National Dairy Show"—1909, 1910, 1911, 1912.

Official Veterinarian
"Iowa Dairy Convention and Cattle Congress"—1910, 1912.

Official Veterinarian
"International Dairy Show"—1911, 1912

Official Veterinarian
"American Royal Livestock Show"—1908.

General Index of Dr. David Roberts' Practical Home Veterinarian

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Gives Quick Relief in Cases of Rheumatism. Once Used, Always Used.

For All Sprains, Bruises, Sore Throat, Lung Fever, Etc., Etc.

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Strained Ligaments and Joints, Contracted Cords, Muscular Soreness, Sciatica, Lumbago, Pleurisy, Side Ache, Lame Back, Sore Throat and Chest, and all Neuralgia Pains.

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THOROUGHPIN,
BOG SPAVIN,
CHAPPED HOCK,
SHOEBOILS, WINDPUFFS,
CALLOUS COLLAR GALLS,
POLL EVIL,
FISTULA WITHERS,
COLD ABSCESS,
ENLARGED GLANDS, such as Goiters, Lump Jaw and Enlargements due to Kicks, Bruises, Cuts, Etc.

If the owner of an animal would stop and consider how much the appearance of it would be improved by the removal of a single blemish, he would undoubtedly have all blemishes removed, and in so doing greatly increase the value of the animal.

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See Cattle and Horse Section for additional information

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See Navel Disease in Colts and Calves; also Foaling and Calving

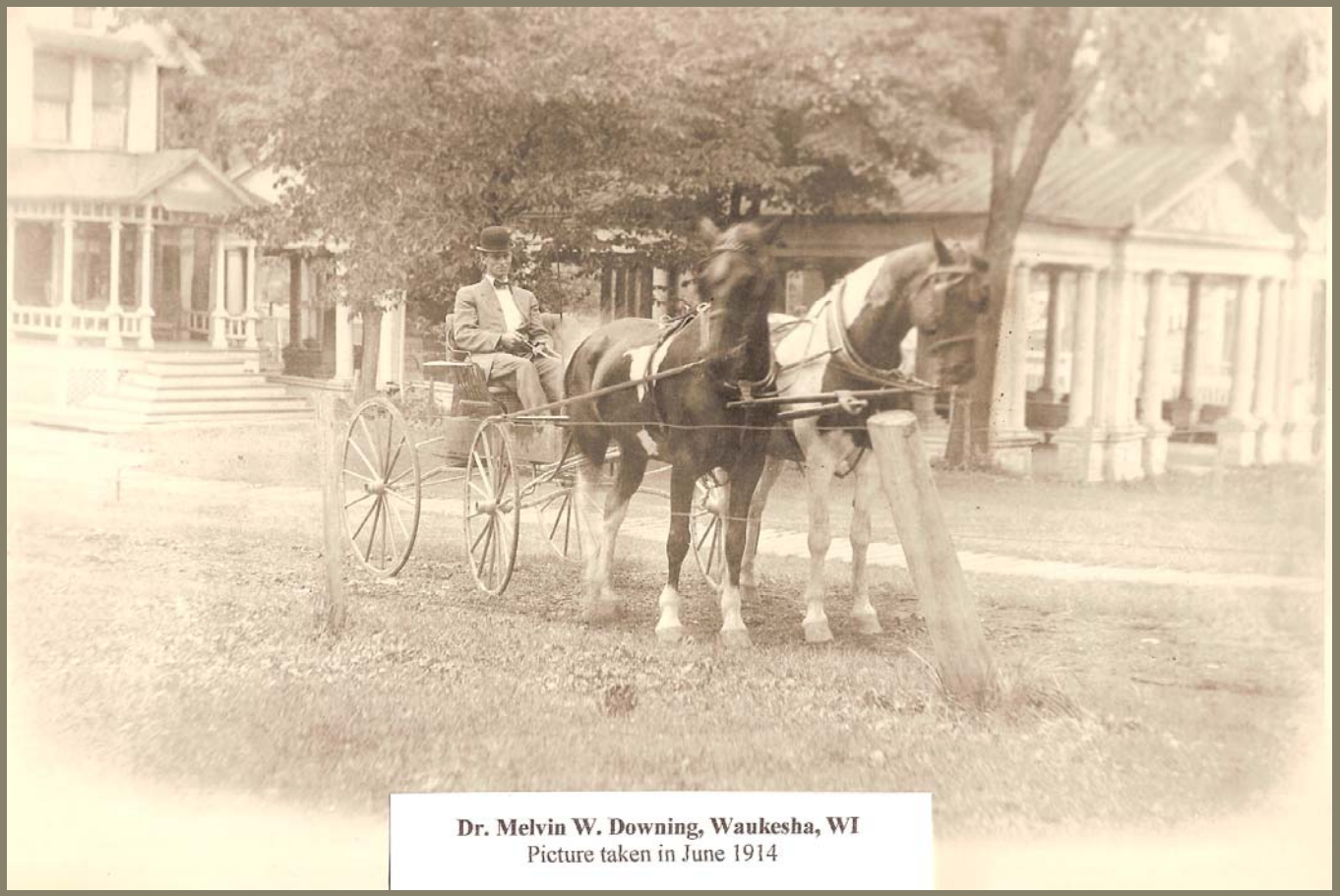
For Preventing Diseases Contracted through the Navel Cord of Calves, Colts, Mules and other Young Animals

The death of 75 per cent. of the young animals which die at birth may be attributed to diseases contracted through the navel cord, such as heat, swelling, lameness and gathering in any joints of the body, usually that of the ankle, hock, knee or stifle, which gathers, breaks and discharges a large amount of pus. Death soon follows unless properly treated; for this reason it is necessary and very important to not only examine, but to treat the navel cord at birth to prevent the death of the young animal.

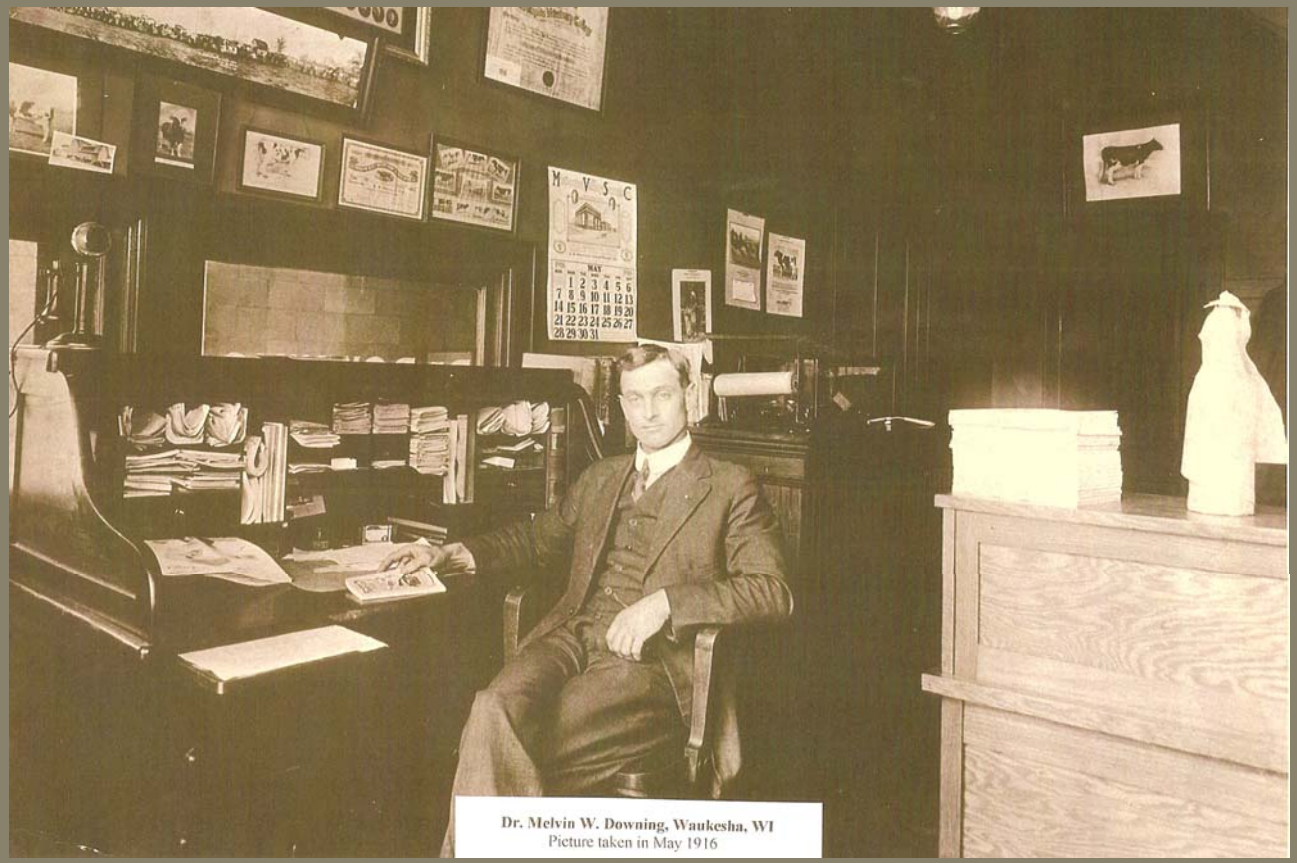
NOTICE.

All apartments where an animal is placed to bring forth its young should be thoroughly cleaned, bedded, ventilated and disinfected. An attendant should be present and the navel cord of all colts and calves should be cut six inches long and tied with a string soaked in Umbilicure and then apply Umbilicure to navel cord as directed. In this manner many a young animal can be saved which would otherwise die without the cause being known to the owner.

Dr. Melvin W. Downing, Waukesha, WI with his buggy and team, in 1914.



Dr. Melvin W. Downing, Waukesha, WI
1916

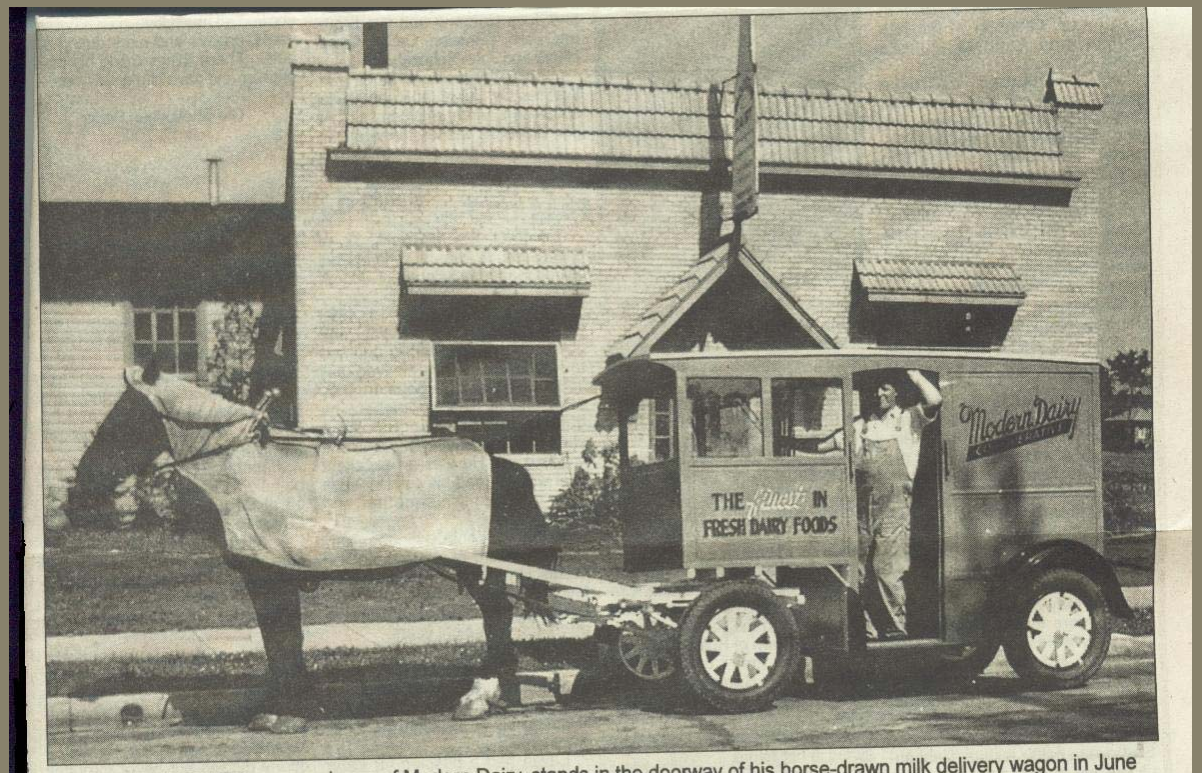


In January 1951, Dr. Melvin Downing was unanimously elected vice president of the Wisconsin Veterinary Medical Association as a result of his stand on a Bangs control program to meet an Illinois law passed in the spring of 1950.

Dr. J.T. Jacobson, Winthrop, Minnesota in 1915, going on a call.

There were some companies that were reluctant to change too quickly from the horse-drawn vehicles, such as this one.

Modern Dairy's horse-drawn milk wagon in 1933, Sheboygan, WI

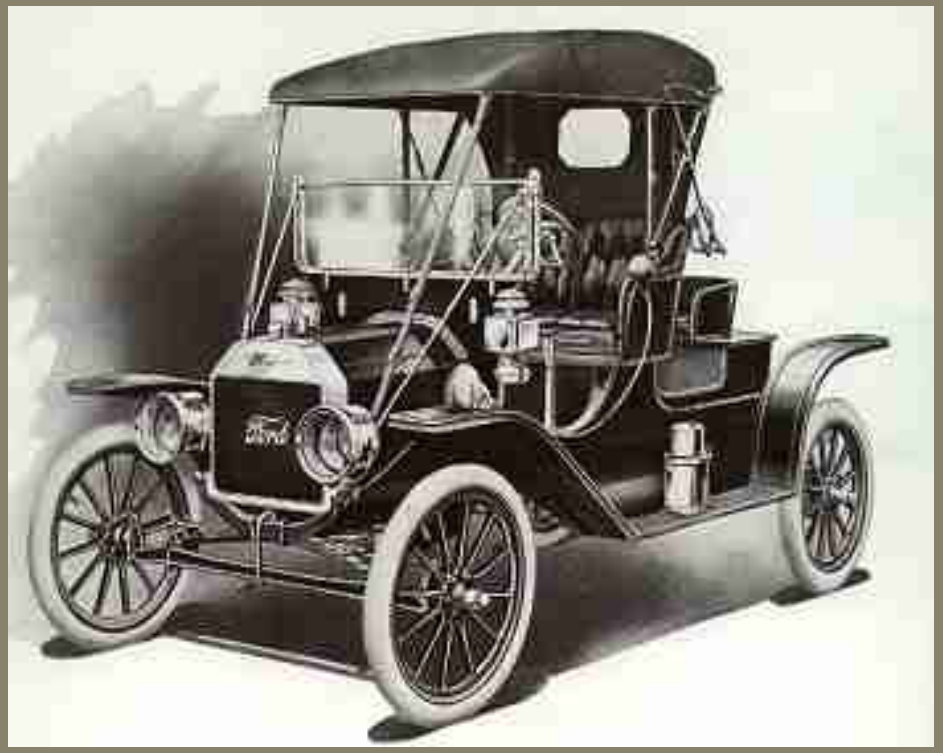


NORBERT MUELLER, an employee of Modern Dairy, stands in the doorway of his horse-drawn milk delivery wagon in June 1933. Photo courtesy of the Sheboygan County Historical Research Center

The Era of the Automobile!

Henry Ford’s Model T -1908

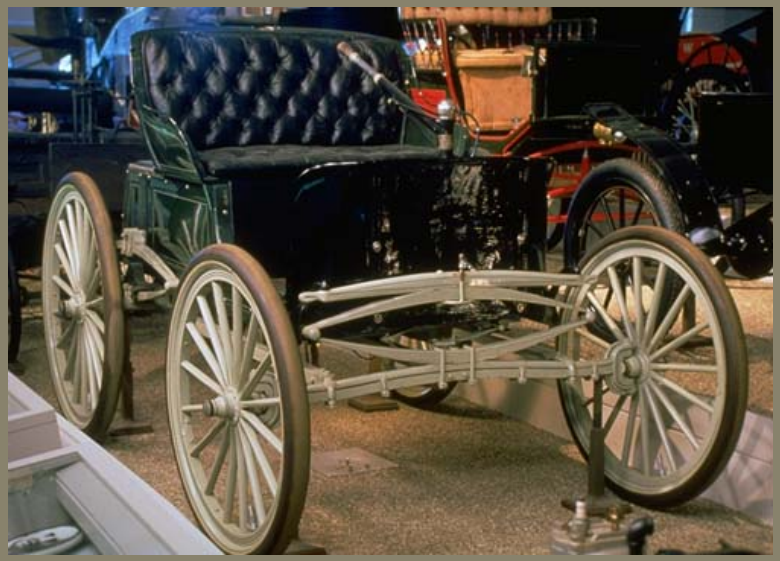
The Model T Ford – by May of 1927, 15 million were made.



Yet, we all associate the Ford Motor Company as the first American automobile manufacturer, but it was The Duryea Motor Wagon Company of Springfield, Massachusetts.

The one-cylinder Duryea "Ladies Phaeton“

From Wikipedia, the free encyclopedia



From The Showroom of Automotive History: 1896 Duryea

In review, this wonderful profession has cared for the horse over the countless centuries since Hippocrates.

Agriculture in Wisconsin was changing. Wheat farming gradually declined in importance as more fertile wheat lands to the north and west were opened to cultivation.

The then-current Wisconsin Governor, Wm Dempster Howard (1836-1918 – Founder of Howard’s Dairyman Magazine for Fort Atkinson), could foresee a growing dairy industry for the Wisconsin farmer and encouraged this transition.

Then in the early 1930’s, the small animal practitioner of what we know of him today, started his practice in remodeled homes or converted barns, in our major cities.

There have been long and trying times in our history, but through the steadfast devotion to the horse this devotion has brought the veterinary profession into the 21th Century.

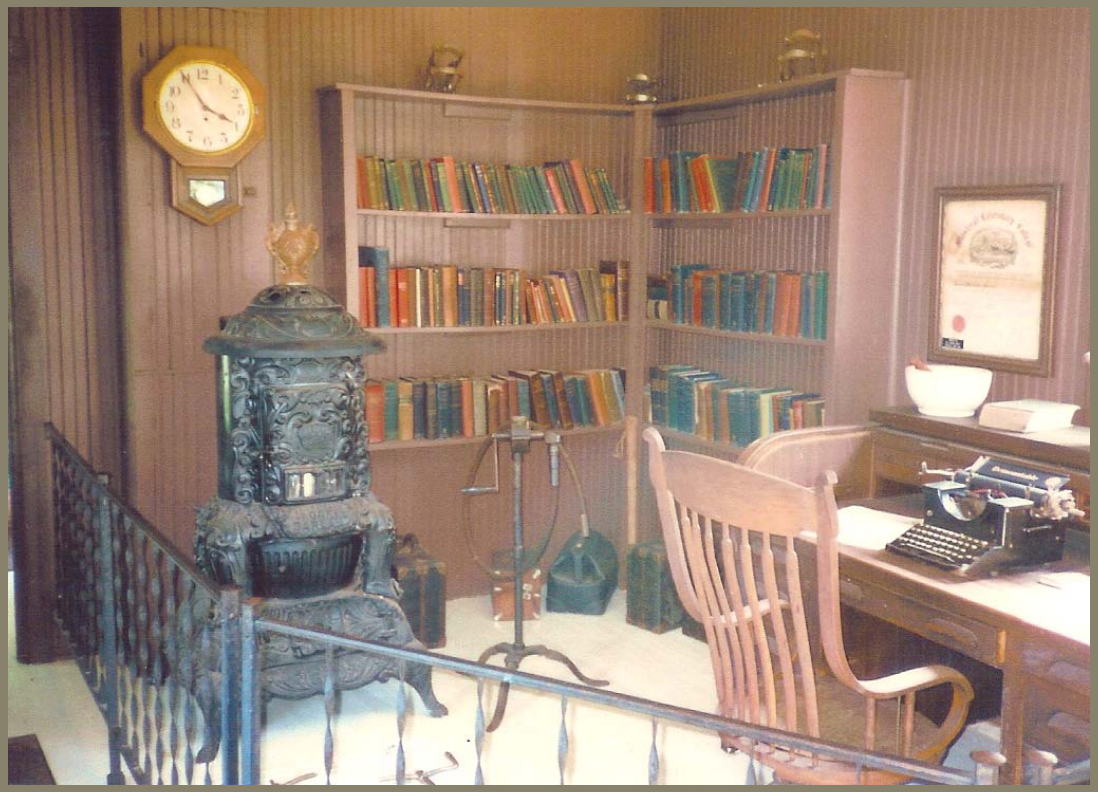
Let’s return to the year, 1900, at the
“Turn of the Century,” as we step back in time,
about 100 years ago, a period when the veterinary
profession was dealing with great change.

Veterinary Surgeon’s Office - 1900’s

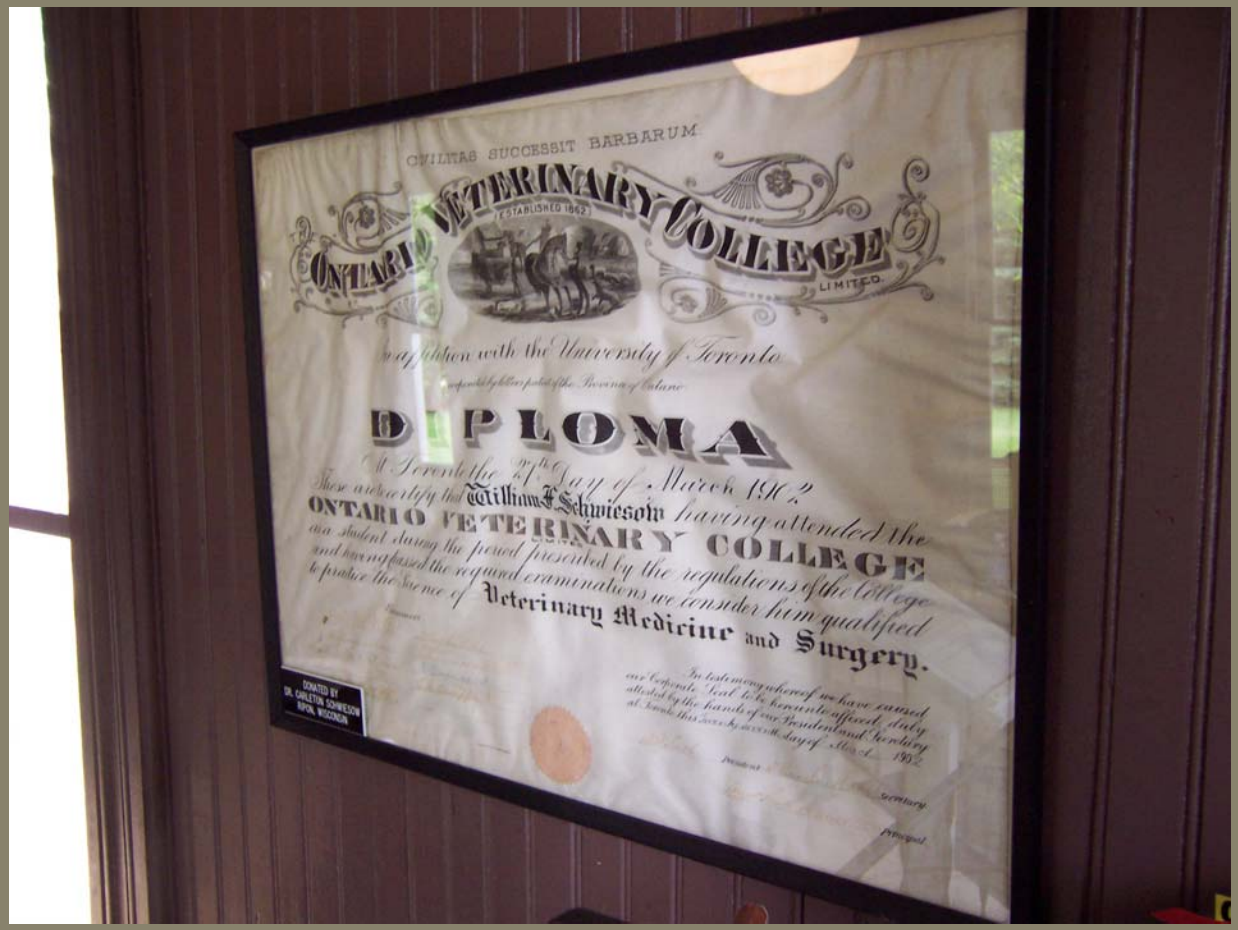
The Wisconsin Veterinary Medical Association plaque – dedicated in 1977

Original Roll-top Desk

Veterinary office with roll-top desk, coal stove and library



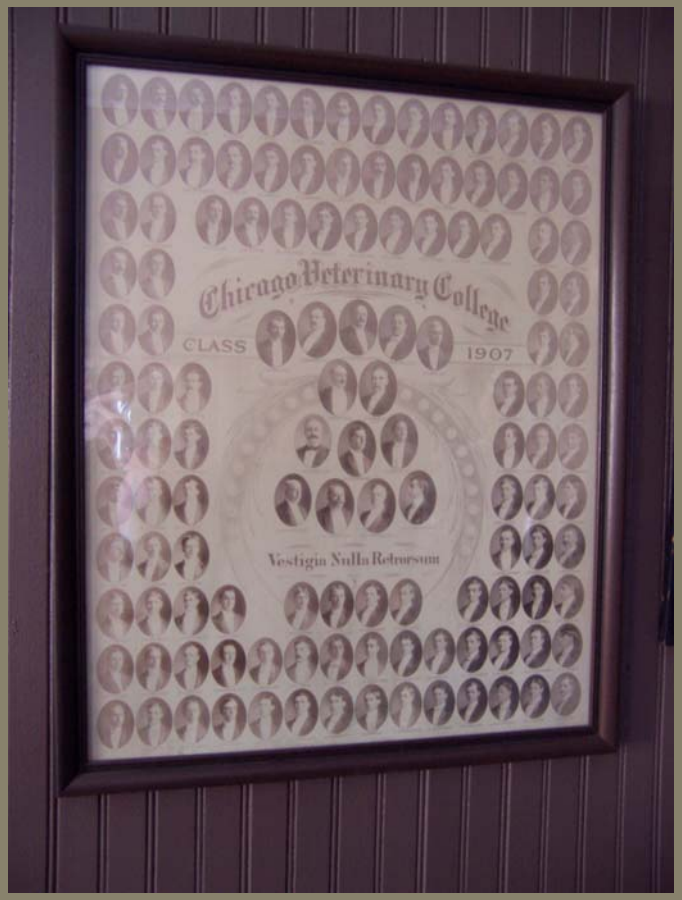
One of the large diplomas displayed in the office.



McKillip Veterinary College class picture of 1906

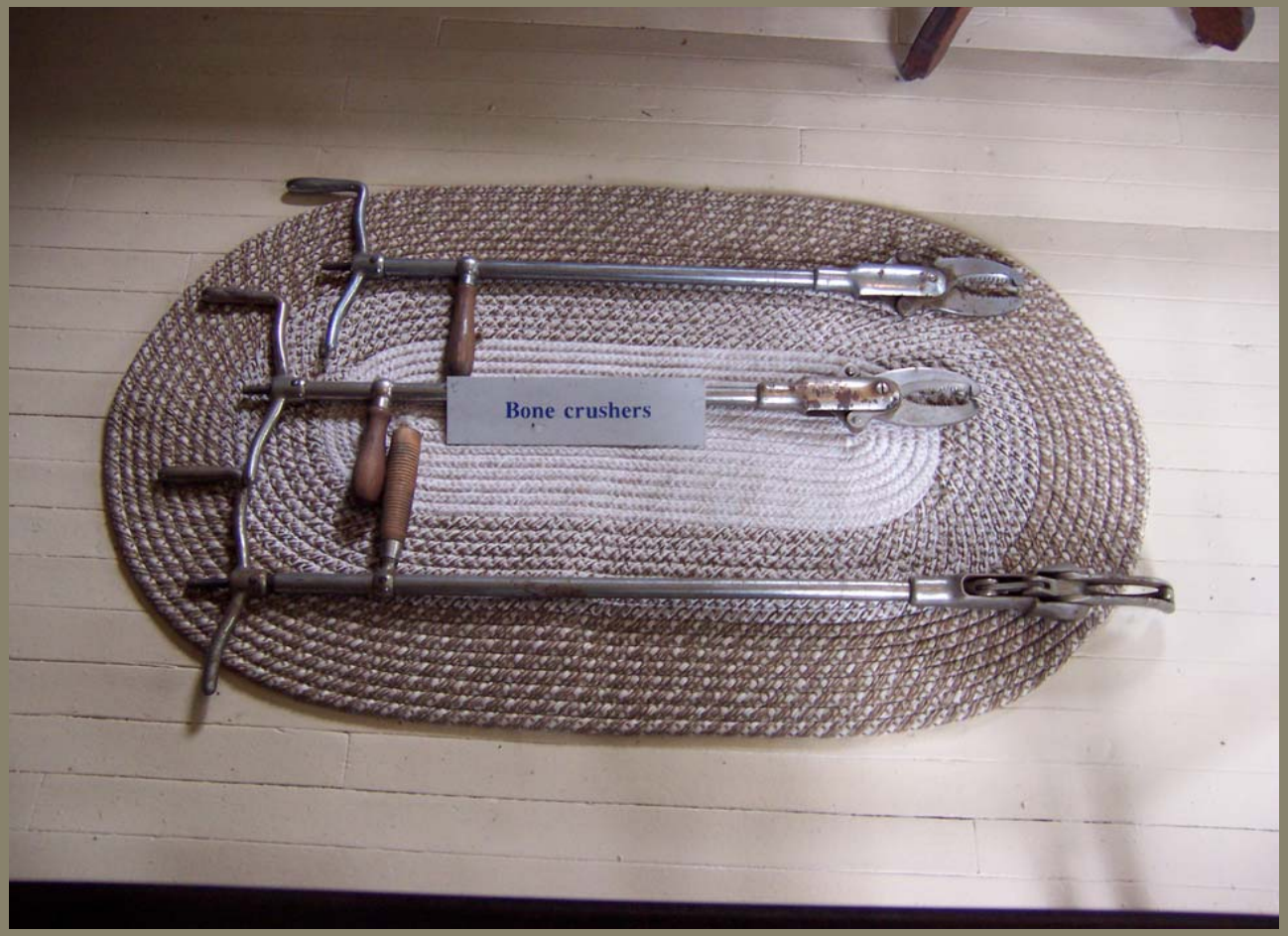
Mignon Nicholson was the first American woman to earn a veterinary degree, graduating from McKillip Veterinary College in 1903.

Chicago Veterinary College class picture of 1907 and a large diploma



Two-man animal hair clipper

Obstetrical instruments



Complete set of equine dental instruments

Equine oral speculums

Fleam -
a blood-letting
instrument

Three-bladed fleam

Veterinary instruments - From left to right: liquid dose syringe, balling gun, trocar & cannula, multiple size (three) balling gun

More obstetrical instruments

A priceless syringe and leather case

Vials of injectable hypodermic tablets

Some of the more common hypodermic tablets

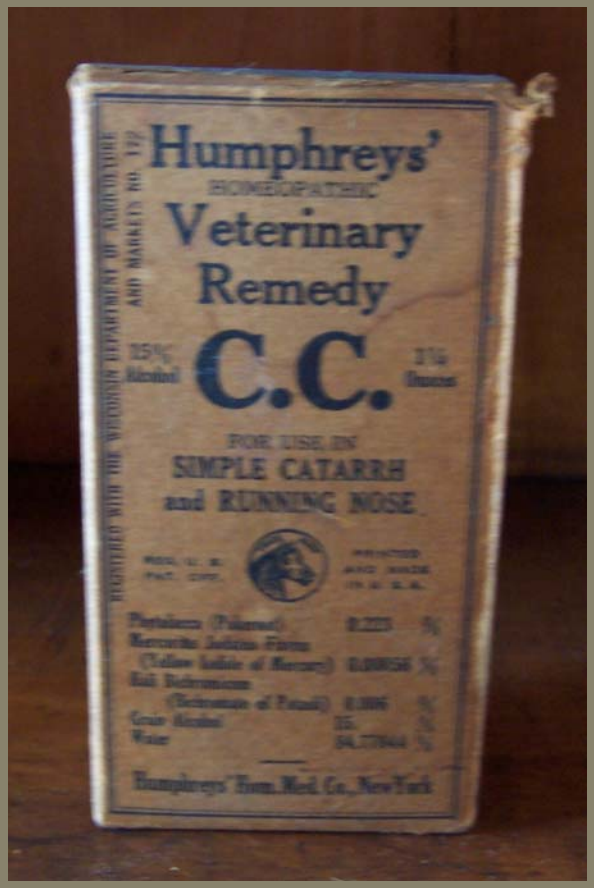
A very useful drug in both human and veterinary practices

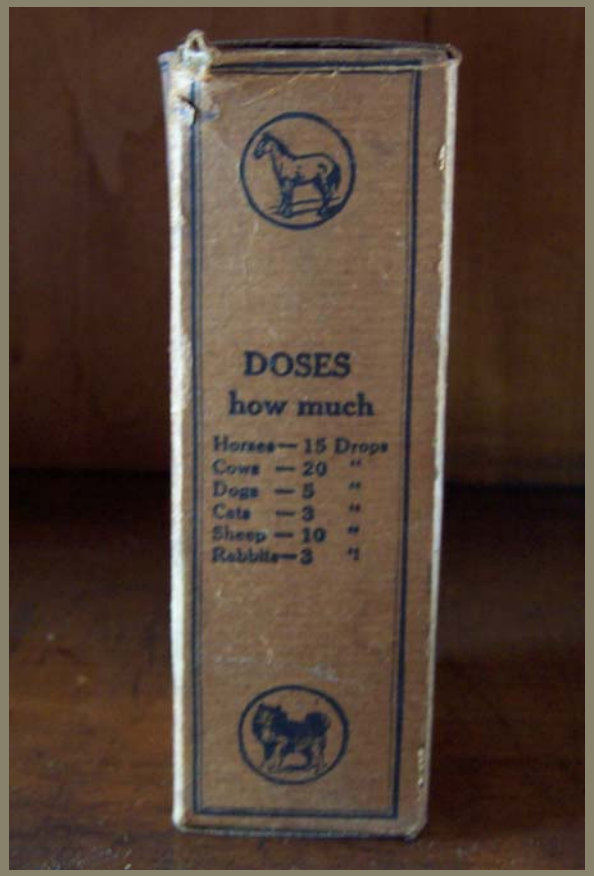
A classic mortar and pestle, used to grind and mix medicinal powders.

Here are two Park-Davis products, that were used in human and veterinary practices in the nineteenth century

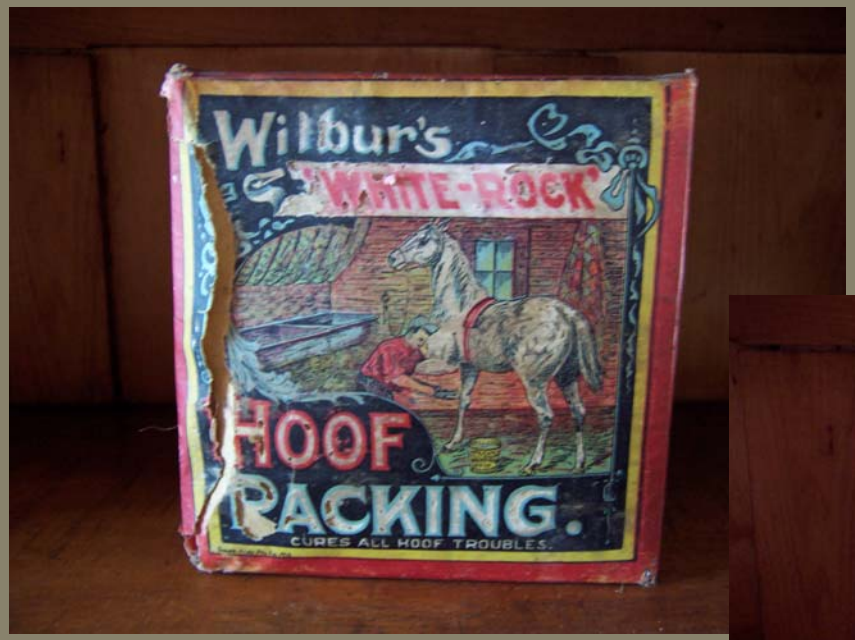
Three very popular powders that were used in making veterinary medications

An example of a patent medicine that was sold in the early 1900's





Hoof treatment - to cure all diseases of the horse's foot & frog



Various surgical instruments, needles, urinary catheters and a cast cutter.

Two types of hernia clamps

Two forms of firing irons, for the treatment of various types of lameness

The ether firing iron was consider a modern invention over the forge fired firing iron in that day

Equine tail-docking shears

Equine anatomical chart

Equine casting harness

An outstanding display of corrective horseshoes for race horses

Mr. Wallace W. Owen, Watertown, WI (1866-1932), a renowned farrier of race horses.

He is pictured here in his office, at the age of 46.

Are there any reminders today of when the horse was the supreme symbol of power?

This Rare Second Empire Style Architecture Was Popular from 1860-1880

The mansard roof is also carried over to the massive carriage house and horse stable.

Beautiful Restored Home on Division St., Fond du Lac, WI

And a Wonderfully Restored Carriage House & Stable, behind this home

Carriage House & Horse Stable - 1896

Carriage House & Horse Stable - 1900

The Ebert House – 1892, “Painted Lady” located on the corner of Park Ave. and Division St.

The “Painted Lady’s” Carriage House & Stable - 1892

Stately home on Division St. with a remodeled Carriage House & Stable

Carriage House & Stable – 1899 with a remodeled addition

This well-restored carriage house & stable was once owned by Dr. L.A. Bishop, a physician in the 1890's. His office and his residence was around the corner.

Then this carriage house & stable was owned by the Hardgrove & Gordon Funeral Home, during 1920-30-40's. They had used horse-drawn funeral hearses during that time, until the early 1940's.

An excellent example of a horse-drawn funeral hearse

Studebaker Carriage - 1885

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As you drive around your own city, take note of any restored carriage houses and horse stables in the older sections of your city. You will be amazed to see how many that you may have missed. A pleasant memory of the era of the horse and the “Horse Doctor.”